Per

AMERICAN MILK REVIEW

Iowa State College Library
OCT 25 1944

VOL. 6 No. 10 OCTOBER, 1944

Want Cleaner Skimming .. BETTER CREAM .. GREATER ECONOMY?

TOMORROW, when your business has returned to normal and you are seeking new sources of profit, you will find many previously overlooked advantages in today's De Laval "Air-Tight" Separator.

The fact that the "Air-Tight" skims cleaner than any separator ever built is going to mean a lot in the future. So is the better bodied cream it is capable of producing . . . and its improved sanitary design.

From the standpoint of pure operating economy, the "Air-Tight" consumes less power and oil than any separator previously available . . . requires fewer parts for maintenance or repair . . . works longer hours with less attendance. In most plants it can reduce the cost of pumping milk and cream . . . and, of course, it saves whatever part of the product has previously been lost in foam.

Better consult De Laval at once regarding replacement if you are in doubt about getting through next year with your present separating equipment. Catalog?

DE LAVAL

SEPARATORS

THE DE LAVAL SEPARATOR COMPANY
165 Broadway, New York 6 427 Randolph St., Chicago 6
DE LAVAL PACIFIC CO., 61 Beale St., San Francisco 19
THE DE LAVAL COMPANY, Limited
MONTREAL PETERBOROUGH WINNIPEG VANCOUVER

"AIR-TIGHT" and "WORLD'S STANDARD" TYPES

AMERICAN MILK REVIEW

Volume 6 NEW YORK, OCTOBER, 1944 No. 10

Looking Ahead With DISA

Two Top Officials of the Big Dairy Industries Supply-Equipment Organization Trace Its Wartime Activities and Its Post-war Programs and Expectations

(By John W. Ladd, DISA President)

BECAUSE we are at war there can be no annual Dairy Industries Exposition this year. Therefore, as president of the Dairy Industries Supply Association, I have been asked to express my view as to what lies ahead in post-war years for the dairy products processors as well as speak of the problems confronting the equipment and supply manufacturers.

Reports indicate that since 1941 our annual milk production has reached a phenomenal total of 118,000,000,000 pounds. This highly perishable food, produced every day 365 days a year, has somehow been miraculously channeled into cheese, dry milk, fluid milk, ice cream, evaporated milk, butter and other dairy products without economic loss or spoilage. These products are consumed by our armed forces and those of our allies, for lend-lease, and the remainder goes to our production legions and their ration-perplexed families. Dairy products processors everywhere have earned their nation's gratitude in accomplishing this great and solemn task.

After war needs are satisfied, it is hoped by many industry leaders to whom I have talked that this great milk flow—so needed for national health and vigor—will be consumed by our people with no surplus and no slipping back to previous production levels. America still has great strides to take in matching per capita consumption figures of our neighbor Canada, of Denmark, Sweden, Holland, or New Zealand in the South Pacific.

Consumption Will Forge Ahead

In my forty years in the dairy supply and equipment field there has always been progress— which will continue! I have faith in American milk producers and processors. They will forge ahead. The present campaigns of the American Dairy Association and the reasarch of the National Dairy Council are only part of growing ground swells preceding our industry's even greater expansion.

During the past two and one-half years there has been only a trickle of dairy equipment reaching processors for necessary plant replacement. Only carefully planned quantities of machinery have been released by WPB or WFA for expansion programs in cheese, butter,

John W. Ladd, President of the Dairy Industries Supply Association.

evaporated milk, dry skim powder, dried eggs and dry whole milk—in that order—for expansion purposes. Ice cream manufacturers have been virtually without new equipment for more than thirty months. How they have weathered the storm has made industry history.

In mid-year of 1943 it became evident to DISA, to the Dairy Industry Committee and to Industry Advisory Committees counseling with both the War Food Administration and the War Production Board, that a twelve months' manufacturing program for sorely-needed equipment and supplies had to be set up to prevent a complete breakdown of certain segments of our milk processing programs.

Early in the last quarter of 1943 the L-292 order for production of machinery was announced. Then the scramble started. Customers of the industry filed applications for needed priorities and DISA manufacturers, with material authorizations in hand, began the long hunt for the motors, controls, ball bearings, castings and other critical items needed for fabrication. Not until early 1944 did many manufacturers get a start on assembly. It is not possible to convert plants making from practically 100 per cent war goods back to dairy machinery manufacture overnight.

Unparralleled Backlog

Today DISA member companies have the greatest backlog of orders in history, and even while struggling to better their delivery schedules, face disheartening material shortages, a serious lack of skilled plant workers and curtailed staffs of office, sales, engineering and service people. In spite of these handicaps and with thousands of our skilled young men still in their country's service, it is reported that deliveries in September 1944 practically equalled a normal pre-war level. This accomplishment should be bettered from month to month.

Many of our manufacturers are in critical labor areas competing for skilled welders, grinders, polishers, assemblers, paper makers, glass workers, machinists, tool and die makers who are still being offered attractive war jobs. Every effort is being made to convince local War Manpower Commissioon and U. E. Employment Service offices that our industry should be given higher employment ceilings where needed, or higher priorities on workers. In some areas this is necessary even for unskilled labor. Former employees returning from the battle fronts after V-E Day will aid our work forces.

It is hoped that authorities in Washington will allow an orderly and sensible conversion from present regulations and controls to normal business enterprise without chaos and confusion. An even and continued flow of materials is vital to steady employment and to meet delivery estimates. This year's program must not be disrupted.

Pre-War Models First

Most dairy equipment and many supply items for the next several months will continue to be pre-war models and types. This is good economy. To fill huge backlogs of orders as soon as possible is of major importance. This fact is recognized by the automotive industry, which, although not yet starting reconversion, has announced the new models off the line will be its 1942 cars to a large extent. Later, in that industry and in ours, will come adaptations to use of interesting new materials and processes which will assure finer dairy machinery and supply items of great usefulness.

During this war your manufacturers and suppliers have been engaged in making thousands of war items,—intricate, secret and vital. Some day this story should be told. It has taught many things. New materials have been discovered. High standards of inspection have been adhered to. Designers, engineers and production men—and women—have a new "know-how" gained in war parts planning and manufacture. These skills will be applied to our vitally-needed food processing machinery.

Many new and important developments are, of course, in progress. These will be released in an orderly way by the industry to facilitate production, improve our products and give new customer appeal. Much experimental and test work is now in progress in countless laboratories and factories.

As an officer of DISA, and in behalf of all equipment and supply manufacturers, I want to thank all dairymen, everywhere, for the fine spirit of cooperation and forebearance shown in the past thirty months. This fine attitude was evident regardless of inability to get their needs handled promptly and completely. As we move forward into 1945 I know all suppliers will try to reflect their appreciation by speeding up deliveries in every possible way.

(By Roberts Everett, DISA Executive Vice-President

WHAT will the Dairy Industries Supply Association be and do post-war? There is no sure blueprint yet, but as the pattern emerges in its various parts it is clear that the organization—popularly known as DISA—should be even more serviceable to all of the dairy industries than it has been in the past, in doing those things that most wholesomely benefit its member companies, the supplies and equippers of the dairy industries.

Even before Pearl Harbor, world war influences on American industry and agriculture began to reshape DISA. Since 1941 the pattern of its operations has changed as radically as has that of any manufacturing company within its ranks. DISA entered new fields, assumed new assignments and responsibilities.

Now as the European war approaches its end, DISA reveals strengths and competences that it had not been called upon to develop or assert before.

Roberts Everett, Executive Vice President of Dairy Industries Supply Association.

One measure of these lies in the number and attitudes of its members. DISA's membership roster is longer than it has ever been before. The cooperative will and method among its members are at their greatest.

Examining the Record

The current and recent pages of its record bear examination, even as the first entries on the post-war pages begin to appear.

DISA, transferring its offices almost immediately after Pearl Harbor to Washington, has become a specialized daily medium of educational contact between the dairy supply and equipment industries and the Government. Also, it has often found itself in a position of reinforcing the dairy industries in their governmental relations.

In a September, 1944 issue of *ATAE News*, a vocational organ for staff members of trade associations in the United States and Canada, in a recap article titled "Go-Betweens" and under an introductory reminder that "As informative go-betweens for industry and government in time of war, trade associations have developed extraordinary ranges of activity," appears this illustrative bit:—

"Dairy Industries Supply Association in two years to a recent date had

(Please turn to Page 300)

POST-WAR LEAGUE MARKET

Survey Among Members Indicates $91,000,000 Potential Sales

A $91,428,000 post-war market for the products of industry and the labor of skilled workers exists among the 28,000 members of the Dairymen's League Cooperative Association, it was announced by Fred H. Sexauer, president.

Mr. Sexauer disclosed that a survey just completed among Dairymen's League members reveals a list of 300 articles that farmers and their families desire to purchase when the war ends and peace time production begins.

The survey reveals that its members need 20,000 new automobiles, trucks and tractors—a $21,433,000 market with an additional $1,880,000 market for truck and automobile repair and maintenance parts. In a list of 21 items, the Associations shows a $13,000,000 market for 74,000 pieces of farm machinery, tools and equipment.

A $33,150,000 market for building materials and labor is listed in the desires of farmers for new homes and barns, and all sorts of repairs and remodeling, ranging from painting and installation of plumbing and electricity to laying new floors. To equip their barns with milk coolers, fire extinguishers, cement floors and other items, the Dairymen's League farmers need 40,000 items that would require a $3,845,000 expenditure.

CHARGE BUTTER UPGRADING

As the latest step in the OPA campaign against upgrading of butter, the regional OPA office has issued orders restraining ten New York City butter distributors from violating ceiling prices. The orders, signed by Judge William Bondy of U. S. District Court here, call upon the firms to show cause why the injunction should not be made permanent, and restrain each from over-ceiling sales until the cases are heard. Hearing is scheduled for October 13.

No announced decision yet in court cases charging upgrading brought by OPA in Chicago. Two cases are pending there, while upwards of 42 Chicago dealers have been threatened with license cancellations if alleged former upgrading is continued.

Editorially Speaking....

DISA Lays Its Plans

THAT the officers and members of the Dairy Industries Supply Association are giving much careful thought and study to post-war trends and problems confronting the dairy business is clearly evidenced by the timely considerations of that wide-awake organization's coming programs prepared by John W. Ladd, president, and Roberts Everett, executive vice-president, which are presented in full in this issue of the "Review". Such outlines of expected plans come at a time when these executives, in normal peace-time, would be occupied with preparations for the usual elaborate, educational and valuable dairy equipment and supplies exposition staged by DISA.

Views of Mr. Ladd and Mr. Everett supply an insight into DISA activities in the post-war period and a heartening preview of what may be expected in regard to the future dairy plant equipment scene. In a sound, business-like manner Mr. Ladd asserts that the first equipment to be manufactured will be of pre-war models in order to fill the backlog of urgent immediate needs in the quickest possible time. New designs and styles will, of course, follow in due course, these unquestionably bearing the imprint of lessons learned in war materiel production.

DISA, in notable manner, has demonstrated its usefulness and flexibility under the wartime economy. Compelled to abandon temporarily some of its prime functions, its alert officers turned its personnel and activities into a service institution of great value to the dairy industry and to its members. It has bridged the gap in an enviable manner. The future aims of DISA as expressed by "Bob" Everett are progressive and on a high level, designed to build the organization to a stature of still greater benefit to the industry as a whole in the post-war period.

Certain it is that all of those engaged in the many facets of the dairy picture and the companies which manufacture its varied equipment and supplies have had their wartime tasks greatly aided by the Dairy Industries Supply Association. May conditions permit resumption of the Dairy Industries Exposition in 1945!

Vast Potential Market

A survey just completed by the Dairymen's League Cooperative Association among its 28,000 members in the entire New York Milk Shed reveals that there is a vast potential market for a wide range of farm equipment, supplies and other materials among eager farmers in the post-war period. From the study it is estimated that the League farm market represents a total purchasing value of $91,428,352, —a tremendous backlog of orders which will be available to industry when peacetime production again functions.

Included in the data is a list of 225 items that League farm members want or need. Just to mention a few, this long list contains the following: one out of every six farmers needs a new truck; one in every seven will install a new heating plant; one out of every nine farmers needs a milking machine; one out of every seven needs milk strainers; one out of every seven needs a milk cooler; one out of every nine needs a new milk house; one out of every four farm houses wants a home freezing unit; one out of every 174 farmers needs a cream separator; one out of every eighty-seven needs a butter churn.

An analysis of the complete list convincingly substantiates the statement that the total potential farm market in the League territory is valued at more than ninety millions of dollars.

Since the survey applies particularly to the situation in the area consisting of the states of New York, New Jersey, Pennsylvania, Connecticut, Massachusetts and Vermont, it may not be accepted as fairly indicative of the post-war farm market on a national scale due to the peculiar types of agriculture and marketing in the areas served by the Dairymen's League. For instance, the bulk of the milk produced in the region mentioned is sold in fluid form and consequently the analysis shows that only one out of every 174 farms needs a cream separator. Should a similar survey be made among farmers in butter producing states, the result would unquestionably indicate a far greater percentage of individuals requiring this particular piece of farm equipment.

Commenting upon the survey, Fred Sexauer, president of the League, stated: "It must be emphasized that this survey does not mean that the 28,000 Dairymen's League farm families have saved up $91,000,000 and have it on hand, ready to rush out and buy all the things they need and want. Our survey shows what they are ready and eager to buy if they receive adequate returns for their products, their labor and investment."

Due to the painstaking manner in which the study was made and the detailed form in which the data is presented in pamphlet form, it serves a most useful purpose in supplying a clear insight into the vast potential market for all sorts of farm equipment and other farm necessities which presently exists, awaiting only the return of peace and peace-time industrial production.

* * *

AND COVERING a broader scope along almost similar lines, another page of this issue of the "Review" presents a statement by the Milk Industry Foundation which estimates post-war expenditures of $360,000,000 by the nation's milk and dairy products processing firms for new equipment and parts during the first two years of post-war operations. This forecast does not include post-war expenditures in the farm equipment field, which will doubtless run into many more millions.

The Milk Industry Foundation mentions specifically a tremendous pent-up demand for such items as homogenizers, pasteurizers, containers, weigh cans, re-

BUY United States War Bonds and Stamps

AMERICAN MILK REVIEW

Member CCA

NEW YORK, OCTOBER, 1944

Domestic Subscription, $2.00 Per Year

Published Monthly by the
URNER-BARRY COMPANY, 173 and 175 Chambers St., New York 7, N. Y.

Chairman of Board, William C. Taber; President, Harold E. Taber; 1st Vice-President, Gordon Urner; 2nd Vice-President, John C. Taber; Treasurer, Paul H. Taber; Secretary, Stephen K. Urner. Address of the officers and publication are the same.

Gordon Urner - - - - - - Editor A. C. Dingwall - - - Associate Editor
J. C. Taber - - Advertising Manager G. Q. Burkett-Asst. Advertising Manager

Mid-Western Representative
GUY W. WHITCOMB
520 N. Michigan Ave., Chicago 11
Phone: Superior 1943

Far Western Representative
J. A. KENDALL
3676 Terminal Annex, Los Angeles 54
Phone: Atlantic 1-7272

South Central Representative
FRED WRIGHT CO.
915 Olive St., St. Louis 1
Phone: Chestnut 1945

ceiving tanks, pumps, separators, coolers and can washers.

In addition to the vast amount of equipment presently needed for replacement there will be a big demand for units of all types for new plants and expansions, to be resumed in the past-war period in a manner historically characteristic of the progressive milk industry.

With their eyes more intently focused on economy of operation and wholesomeness of product, the milk industry may be counted upon to be a mighty contributing forward force in the post-war readjustment and reconversion period.

Popular New Container

PLEASURE and satisfaction are convincingly registered by the charming housewife as she opens her neatly-stocked refrigerator, illustrated on the front cover of this issue of the "Review". And one of the reasons for her appreciative expression is the space-saving arrangement and attractiveness of the square bottles of milk stored in the top compartment.

According to the many reports already received, the square bottle is finding ready consumer acceptance wherever introduced, due to its space economy in the refrigerator, easy-to-pour and handling advantages, and convenience in washing.

Milk plant operators, drivers, consumers and retail store owners all apparently acknowledge the merits of the square bottle to such an extent that from present indications it promises to become one of the most popular containers in modern milk distribution.

Chester E. Gray

WITH THE PASSING of Chester E. Gray not only does Golden State, Ltd., of California lose an esteemed and valued Chairman of the Board, but the dairy industry at large suffers a distinct loss. As a trained and experienced dairy scientist, Mr. Gray made many contributions of lasting benefit to the industry; and in creating the American Dry Milk Institute he did more than any other man to enlarge the merchandising scope of the dried milk division of the dairy field.

Mr. Gray was untiring in his efforts to perform something worthwhile and to be of service to others. His reward was the satisfaction of having a job well done. He had a genial disposition, and made hosts of friends from California to New York.

All who knew Chester Gray had the greatest admiration for his sterling qualities, and deeply mourn the passing of this progressive industry leader.

JOHN M. COLONY DEAD

Head of Manton-Gaulin Company Developed Homogenizer

John M. Colony, president of the Manton-Gaulin Manufacturing Company, well known manufacturers of homogenizers, died September 5, at the age of 58. He was born in Wilton, New Hampshire, October 21, 1886.

John M. Colony

Mr. Colony was a pioneer in developing the first homogenizer for Manton-Gaulin company. Later he developed and patented the Colony Two Stage Valve and be manufactured the Colony Homogenizer independently for approximately five years. In 1932 he returned to Manton-Gaulin to reorganize the company and became its president in 1934.

Recognized as an authority in the homogenizer field, Mr. Colony served as a member of the Dairy Industry Advisory Committee, War Production Board.

Mr. Colony's two sons, John K. and Donald G., will carry on the business. At the present time John is serving in the Naval Air Force.

WAR FOOD DINNER

Lee Marshall Stresses No Dumping of Government Surpluses

Six hundred leaders of the food trade in New York City met with Lee Marshall, Director of Distribution, War Food Administration, at a dinner in the Grand Ballroom of the Hotel Pierre, October 9. The dinner was arranged by the New York City War Food Advisory Committee with the cooperation of the Mercantile Section of the New York Board of Trade.

Special guests of the New York War Food Advisory Committee included Mayor F. H. LaGuardia; Commissioner H. M. Brundage, Department of Markets and Commissioner E. L. Stebbins, Department of Health, City of New York; F. H. Cronin, Regional Director, Office of Distribution, War Food Administration. Matthew G. Ely, president of the New York Board of Trade, presided at the dinner.

Mr. Marshall talked on the food situation and the proposed distribution of Government food surpluses in an orderly manner after the conclusion of the war. Mayor LaGuardia and Chester Halnan, Chairman of the New York City War Food Advisory Committee, also delivered brief talks on the local food situation.

PLAN AMHERST SESSIONS

Amherst, Mass. — Professor J. H. Frandsen, head of the Department of Dairy Industry at Massachusetts State College, has announced a conference of milk plant operators and milk inspectors of the state to be held at the College in Flint Laboratory in the Dairy Industry Building on October 17 and 18. The sessions will open promptly at 10 A.M.

Leading speakers are scheduled to talk on the first day on various up-to-the minute plant operating problems, including short-time high-temperature pasteurization, automatic controllers, maintenance problems on pasteurizers, cleaning and sterilizing this type of equipment, sediment removal, etc.

Milk inspectors will hold a banquet on the evening of October 17, while on the following day visits will be made to laboratories of the Departments of Food Technology, Nutrition, Dairy Industry, and the Dairy Barns of the College.

MILK ORDER UPHELD

Washington, D. C.—The U. S. Supreme Court refused a request by the New York State Guernsey Breeders' Cooperative, Inc., that it review an order by Secretary of Agriculture Claude Wickard regulating the handling of milk in the New York City marketing area.

The cooperative that markets the members' milk from Guernsey herds in the New York area, contended the order should have provided a favorable price differential for Guernsey milk because of its quality. The Second Federal Circuit Court upheld the order.

MILK BOTTLERS MEETING

The thirty-second annual dinner of the Milk Bottlers' Federation, New York area organization, will be held Thursday evening, November 16 in the Grand Ballroom of the Hotel Pennsylvania, New York City. Headquarters of the bottlers' group are at 90 Grand Ave., Brooklyn 7. Prompt reservations are requested.

MANAGER ELECTROCUTED

Seymour, Ind. (E.B.) — Richard A. Brand, manager of the Hoffmeister Farmers Dairy Products Co. here, was electrocuted at the plant while attempting to make some repairs to the wiring. Artificial respiration and other means failed.

He was a member of the local Chamber of Commerce and was scribe of the local chapter, Order of DeMolay. The widow and his mother survive.

ENLARGING DAIRY PLANT

Holyoke, Mass.—Work is in progress on the addition to the milk plant of the Kane's Dairy Co., 1534 Dwight St.

NEW and IMPROVED!

New and improved to do a better sales job, the General Mills "Dollars for Dairies" conversion program now offers nine complete sales campaigns for your Vitamin D Milk.

Whatever your advertising problem is, you can find a sales campaign tailor-made for your needs in the "Dollars for Dairies" program. Each of the nine separate and complete advertising campaigns is designed to accomplish a specific job.

These campaigns contain one of the most powerful groupings of advertising material ever assembled for Vitamin D Milk. Included are 26 newspaper ads, varying in size from one to four columns; handbills; vitamin charts; posters, menu sheets for hotels and restaurants, bottle collars, folders and doorknob hangers, all in attractive colors; plus letters for doctors and dentists, radio continuities, instruction booklets and sales contests for routemen. All materials are available at our material cost, for regular and homogenized Vitamin D Milk.

Why not make a free inspection of the complete "Dollars for Dairies" brochure now? Just mail the coupon below and full details will be sent at once.

GENERAL MILLS, INC.
SPECIAL COMMODITIES DIVISION
MINNEAPOLIS 15, MINNESOTA

Yes!

General Mills, Inc., Special Commodities Division AMR 10-44
400 South Fourth Street, Minneapolis 15, Minn.

Please send me a free copy of the new, improved "Dollars for Dairies" brochure, along with details about Vitamin D (A. R. P. I. Process).

☐ I am now fortifying.....quarts milk—Homogenized ☐ Plain ☐ (check which)
☐ I am not now using Vitamin D. I have ☐ have not ☐ Homogenizer.
☐ Send me full information about the "Dollars for Dairies" Conversion Plan for my Vitamin D Milk.

Name of Dairy.....
City.....*Zone*..... *State*.....
Signature.....

August Milk at $3.83

Dairy Feed Payments of 45c Added to Uniform Rate of $3.38—Records for Month Topple

Dairy farmers of the New York milkshed received a record return of $3.83 per cwt, for August deliveries under the compilations by Dr. C. J. Blanford, administrator of the New York metropolitan milk marketing area. The pool, which priced 467,658,224 pounds of milk delived in August, yielded a uniform price of $3.38 a hundredweight, according to the administrator's computation. With dairy feed payments from the War Food Administration at the minimum of 45c a hundredweight, however, dairy farmers in the six states collected at the total rate of $3.83 to surpass an August peak of $3.56 that has stood since 1920.

Dr. Blanford reported that farm income from August deliveries came to $18,406,518.25. The pool yielded $16,302,056.25, including butterfat and location payments, while the balance of $2,104,462 represents the value of the WFA payments at the minimum rates.

A gain in income amounting to $2,231,295.49 in comparison with the pool return for August 1943, is thus credited to the milkshed's 51,141 New York-area approved producers. The pool of a year ago, prior to the WFA feed-payment program, was worth $16,175,222.76. It was shared among 52,691 dairymen at the uniform rate of $3.28.

Daily Deliveries at Peak

In addition to an all-time high in the rate of return for August milk, a new record in productivity was set in the face of a drought that prevailed generally in the milkshed. Producer deliveries to the pool's 450 plants were clocked at the rate of 295 pounds a day per farm. Daily deliveries in both 1942 and 1943 averaged 291 and 292 pounds respectively, and still lower rates were record in August in preceding years.

With the consumption of fluid milk recorded at 248,863,873 pounds in August the New York market broke a month-old record for fluid use in a calendar month. The July figure was 244,181,647 pounds sold in fluid form. August fluid consumption, averaging 8,027,867 a day, failed by a narrow margin to equal the peak rate of 8,132,403 in June of this year. The total for June—a 30-day month—was 243,972,087 in comparison with the higher total for the 31 days of August.

Shipments of fluid milk to other urban markets along the Atlantic seaboard, however, was less this August than in the previous same month. Sales of the so-called outside fluid milk came to 56,505,278 pounds in August 1943, but fell to only 48,123,499 pounds in August 1944. In pre-war years, demands from other markets, however, ranged between 25 and 35 million pounds a month with a peak in the vacation months.

Expect $4.22 in September

Dr. Blanford later forecast a uniform price of $3.42 for milk delivered in September. The anticipated price is 16 cents higher than the price paid in the corresponding month of 1943.

As a result of the administrator's estimate of the New York pool rate, the total return to be expected by producers is $4.22 for September milk. Dairy feed payments at the minimum rate of 70 cents and drought relief at 10 cents a hundred pounds of milk—a total of 80 cents from the War Food Administration—accounts for the higher total return.

If the price estimate is proven correct the total yield will be the highest rate ever paid dairy farmers for September milk. The previous high for the month, as listed by Cornell University records, was $3.86 for milk of 3.5 per cent butterfat in September 1920.

ALMROTH LEAVES O-I

Resigns from Post of General Advertising Manager of Owens-Illinois

Thomas K. Almroth, general advertising manager of Owens-Illinois Glass Co., and associated with the company for nearly 30 years, has announced his resignation, effective October 15.

T. K. Almroth

Mr. Almroth said his decision was "based largely on the conviction that post-war, the wealth of experience I have gained could be put to broader use in another field. His plans will be announced later.

J. P. Levis, Owens-Illinois president, said Mr. Almroth's resignation was accepted "with considerable regret on the part of the company."

"Tom's name," he declared, "has become synonymous with advertising at Owens-Illinois, beginning with the days when only a few trade journals were used up to the present when we find the company signature affixed to pages in mass circulation publications as well as in scores of important trade journals."

Mr. Almroth is a charter member and past president of the Toledo Industrial Marketers, a chapter of the National Industrial Advertising Association. He has represented Owens-Illinois for 10 years in the Association of National Advertisers.

Sanitarians Meet

Subject of Maintenance of Ample Sanitary Supply Features at Conference in Syracuse, Sept. 21

At the twenty-second annual conference of the New York State Association of Milk Sanitarians in Syracuse, Sept. 21, Dr. Ernest L. Stebbins, New York City's health commissioner, stated, "The development of uniform sanitary requirements and the economic stabilization of the milk industry must be solved before the provision of a permanently safe and adequate supply of milk can be considered assured.

In his prepared talk, Dr. Stebbins declared, "the problems in maintaining a safe and adequate milk supply for a large city may be divided into two general clossifications:

"1. The problems inherent to the application of sanitary safeguards for a milk shed sufficiently large to supply an adequate supply for 7,500,000 people especially in view of the interrelation of sanitary and economic factors, and

"2. The probably temporary problems associated with wartime conditions. • • • The operation of the State and Federal Market Order provides a logical solution to the development of economic stability and the various proposals for the development of standard and uniform ordinances with possible reciprocal relations between governmental units seems to be the best solution to the sanitary problem."

The talk delivered by Dr. C. J. Blanford, New York milk marketing area administrator, is presented in full on other pages of this issue of the "Review".

The association elected Samuel Abraham, Slate Hill, president, succeeding Iver Mikkelsen, Pleasantville. W. D. Tiedeman, Albany, was re-elected secretary-treasurer and E. St. J. Baldwin, New York City, was named vice-president.

ANIMAL FEED CEILINGS

Effective September 14, the OPA established maximum prices for sales and deliveries by manufacturers of dry skim-milk with a maximum of 8 per cent moisture for animal feed for quantities of 10,000 lbs. or more in bags of 10c per pound f.o.b. plant, regardless of location.

On sales of 600 to 9,999 lbs. inclusive, the manufacturer may add a 1/10c per pound and on lots under 600 lbs. ¾c per pound. To these base prices transportation charges and expense is to be added as well as ¾c wholesalers' mark-up and an additional ¾c to ¾c retailers' mark-up.

Spot New York City values are thus most uncertain and variable.

Buflovak DOUBLE EFFECT
MILK EVAPORATOR

Condensed and evaporated milk is one of America's basic food staples. Huge quantities are needed for our armed forces, and domestic demands have increased tremendously. Post-war markets will be equally attractive.

If you are planning to get into production of condensed or evaporated milk now, or after the war, learn all about the profit-possibilities of Buflovak Double Effect Milk Evaporators. With Buflovak equipment you can be certain of fine flavor, good color, and an all-around top quality product. And, vitally important is Buflovak's saving of 50% in steam and cooling water.

This low cost production enables you to compete favorably IN ANY MARKET and get maximum returns from your Buflovak investment.

Buflovak Double Effect Milk Evaporators are made in a wide range of sizes and types for all production needs. Write for complete details now.

BUFFALO FOUNDRY & MACHINE CO.
1591 FILLMORE AVE. Dept. M. R. BUFFALO 11, N. Y.

A COPY OF BULLETIN 329 WILL BE SENT WITHOUT OBLIGATION

NEW YORK—295 Madison Ave.
ST. LOUIS—2217 Olive St.
CHICAGO—1636 Monadnock Bldg.
OAKLAND, CAL.—1706 Broadway

Looking Ahead With DISA

(Continued from Page 294)

undertaken, through staff or committees, some 1,200 government interviews on matters relavent to roughly 400 products, programs or management problems affecting some or all of 200-odd member companies in some 15 product or functional groups. It had issued 245 confidential war bulletins conveying to an average of 400 member company executives some 4,750 items of information, and 15 republishable general bulletins to an average of some 40 dairy industrial periodicals and dairy processors' trade associations, incorporating 1,000 items of highly condensed information. Additionally DISA's staff has handled some 1,200 individualized membership requests for special information, some 50 of these involving the launching of specialized fact-getting projects."

Of course there have been other war-years' activities also. DISA's Board of Directors in its last report to the member companies recited such matters as these as having called for study or action by committees or staff: curtailment of production, — materials' availability, — manpower,—price control,—War Food Administration policies and procedures,—Dairy Industry Committee collaboration, etc.

Corps of Committeemen

Today DISA, although the war's progress has allowed its former quite numerous war problems' subcommittees to lapse, has some seventy-five member company executives or special other DISA representatives serving upon internal committees or collaborating, under instructions, in the activities of other groups or institutions.

So DISA has had its war work—involving small matters and big; sometimes routine, sometimes delicate and unusual—as the last three years of initial American defeat, of the turning of the tide, and finally of tremendous victories, have brought to all of the American economy their unexampled problems and needs.

DISA during the war has accomplished internal structural changes and made some important long range policy shifts:

1. Membership is no longer of one class. There are now regular, regional and associate divisions. In the latter two, standard annual dues rates obtain. The regular membership dues rate is variable, however, by a formula uniquely developed within DISA and appropriate to the unusual diversification of products which the regular member companies manufacture or distribute.

2. Effective early in 1945 DISA's Directors will number eighteen, ten of them to serve as Directors-At-Large and eight as Commodity or Functional Directors from the following fields:

- **A. Processing and handling equipment and components**
- **B. Ingredients**
- **C. Containers**
- **D. Chemicals and refrigerants**
- **E. Delivery**
- **F. General commodities and services**
- **G. Point-of-sale materials**
- **H. Jobbers**

3. Regular and regional member companies only hereafter may exhibit in the Dairy Industries Exposition. Associate members will enjoy certain exposition privileges not, however, including the presenting of displays. Non-member companies may not exhibit.

Post-War Plans in Making

To quote a published report of its Board of Directors, DISA has assumed throughout the last three years that a part of its responsibility has been "to hold ready for resumption those of its pre-war undertakings now inactive or only nominally active that are likely to have post-war use." Such resumption will come about in due course and as circumstances may dictate.

Moreover, there will be certain changes in all our lives and in the general economy which will have been produced by the war but which, perhaps, are not clearly foreseen yet. DISA hopes to remain flexible enough to organize, or become an instrument for, new activities—if these are needed—as post-war trends or difficulties more clearly reveal themselves.

It seems proper to assume now that DISA will be concerned with such things as:

Resumption of the Dairy Industries Exposition at the earliest moment that will fully serve the industries' and the still-warring country's needs. Cooperation on a national basis with dairy processors' and dairy manufacturers' associations.

Encouragement of fair business practices.

Encouragement of production of quality dairy products.

Close *liaison* with milk sanitarians; and a constructive concern in the practical adapting of advances in sanitary science.

Encouragement of dairy research in all phases and in every quarter.

Encouragement of both collegiate and special educational programs to bring trained personnel into the dairy industries.

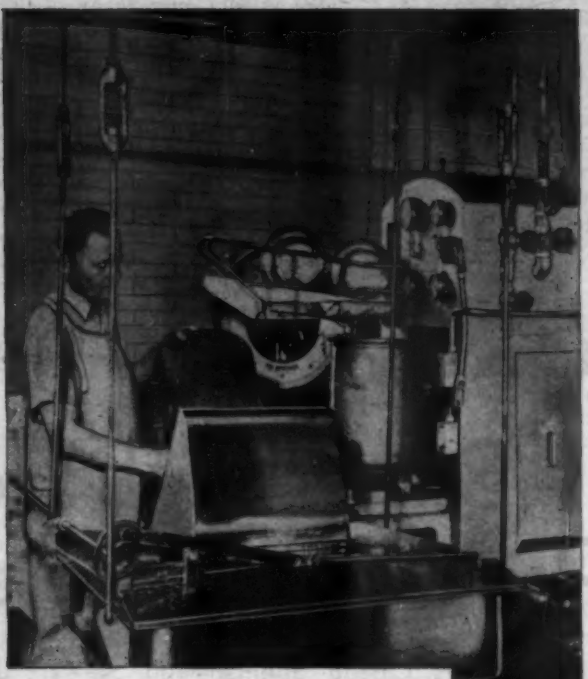
Further, there will be internal service undertakings to facilitate its member companies' transacting of business well informed and with minimum waste.

Confidence in Dairy Industries

DISA, it should be understood, is no "bear" on the future of the dairy industries. True, DISA sees hard work and many problems ahead for its member companies and their thousands of dairy industrial customers. But DISA also has long observed that hard work and a succession of problems have been the permanent lot of the industries it serves, and that neither have halted growth and progress.

So DISA holds strong confidence as it looks ahead!

The dairy industry looks forward to expositions showing latest developments in dairy plant equipment



HELPING SUPPLY BOTH is our wartime job

OFFICIAL U. S. NAVY PHOTOGRAPH

Turning out essential parts for Army and Navy equipment—such as the submarine valves in the background of the left-hand illustration—has taken practically all our time since Pearl Harbor.

Recently, however, new methods plus new men and women now thoroughly trained in their jobs make it possible for us to again produce dairy equipment, *in addition to war orders* we're filling.

If your plant is in need of replacements or new equipment to meet present needs or future demand, we'll be glad to talk over your requirements with you.

R. G. WRIGHT COMPANY, Inc.

2933 MAIN STREET, BUFFALO, NEW YORK

MANUFACTURERS of

PASTEURIZERS
CAN WASHERS • BOTTLE WASHERS
SURFACE COOLERS
RECEIVING TANKS • WEIGH CANS
and other equipment

for the Dairy Industry

Dr. Leland Spencer

In the following article, prepared exclusively for the "Review", the authors comprehensively discuss solution of the increasingly important question of the establishment under market milk pricing mechanisms of proper allowances for differences in butterfat content of the flow from the dairy farms into merchandising channels of certain leading consuming areas.

The present consideration, based upon latest information on butterfat differentials now used in a number of large markets throughout the country, brings up to date a report on the subject published under their joint authorship about a year ago.

Dr. Spencer, internationally-known milk economist, occupies the chair of Professor of Marketing in the New York State College of Agriculture, Cornell University. Dr. Johnson, whose work is increasingly directed toward various phases of the economy of milk merchandising as an associate of Dr. Spencer, is on the staff of the College's Department of Agricultural Economics.

Dr. Stewart Johnson

Butterfat Differentials *Used in* Paying Producers *for* Market Milk

[By Drs. Leland Spencer and Stewart Johnson, Cornell University, Ithaca, N. Y.]

DURING the past year or two the question of proper allowances in the price of market milk for differences in its butterfat content has come in for lively discussion in many places. Proposed changes in butterfat differentials have been one of the chief topics considered at public hearings on revision of federal and state milk control orders. The reason why butterfat differentials have suddenly become an important problem is that in many markets, especially in the Northeast, the price allowance for extra butterfat has remained fixed while the basic price of milk has risen to the highest level in 25 years. Thus the butterfat differentials have become seriously out of line with the general level of prices and the producers of high-test milk are severely penalized.

This condition does not exist everywhere but is quite serious in New York, Philadelphia, Milwaukee, and a number of other markets where the rates have remained constant for many years. In the western states the question of differences in price for milk of different butterfat contents also is serious but the situation is different. In the western markets milk for city supply as well as that for manufacture is generally bought at specified prices per pound of fat. Under this system of payment the price per hundredweight varies in direct proportion to the butterfat content of the milk. When prices go to abnormally high levels as at present, this method of purchase leads to difficulties for it places too great a premium on high-test milk.

The New York Situation

The situation that has developed in the New York area with respect to butterfat differentials is more or less typical of that which presents itself today in many markets where the allowances have not been changed for a long time. It was not until 1913 that the New York dealers recognized any difference in the value of milk due to variations in the butterfat test. Then a single flat-rate premium of 10 cents per hundredweight was paid for milk testing 3.8 or higher. A year or two later the idea of varying the price a certain amount for each point of variation in the test was introduced.

At first the differential was 3 cents a point above or below 3.8 per cent. In October 1917 the rate was raised to 4 cents a point, the basic price being quoted for 3.5 per cent milk. No further change has been made during the 27 years that have passed since 1917. During that time the average yearly price of 3.5 per

An Invitation from REX COMPANY to

acquaint you with the latest methods in food plant sanitation

★ **MIKRO-SAN** U. S. PAT. NO. 2,330,688 — The original acid cleaner for can washing and general cleaning.

★ **REX MILKSTONE REMOVER FOR TINNED EQUIPMENT** U. S. PAT. NO. 2,330,689 — Formerly known as formula 1029-1 —The safe cleaner for removing milkstone and waterstone from all tinned surfaces.

★ **REX MILKSTONE REMOVER FOR STAINLESS STEEL** U. S. PAT. NO. 2,330,690 — An extreme active and effective cleaner for such difficult jobs as stainless steel deodorizers, pasteurizers, etc.

★ **REXCO-PHOS** — Formerly known as No. 372-2—A safe and active cleaner for general use wherever a good alkali cleaner is needed.

★ **REX ACID INHIBITOR** — For use in descaling bottle washing and can washing machines safely with no danger of freezing or sticking the machine.

★ **EXCELCIDE VAPO SPRA** — A specially fortified product that kills roaches and all insects by inducing both a respiratory and a leg paralysis.

★ **EXCELCIDE REPEL MIST** — A non-poisonous insect repellant—Kills insects by leg paralysis. A non-volatile liquid and will remain on the surface for a long period of time and remain effective.

★ **DOW METHYL BROMIDE** — For gas fumigation of food plants.

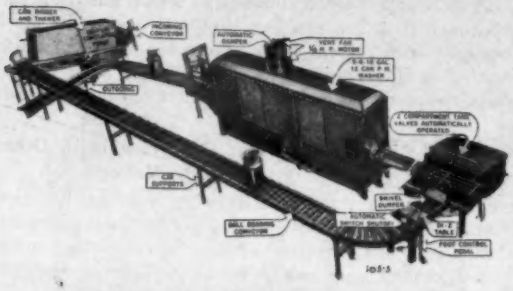
A booklet describing in detail all of the above sanitary products and the methods of application will be sent upon request.

THE REX CO., BURLINGTON, IOWA

REMEMBER . . .

DAMROW COMPLETE DAIRY EQUIPMENT

. . . . Your Modern Aid to Higher Production on Less Manpower



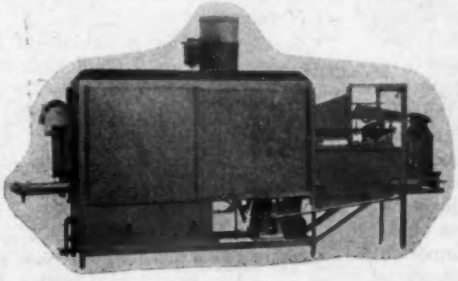
Better protection to dairy product quality . . . lowered man-hours, reduced operating costs, increased production efficiency . . . these have long been welcome benefits in dairies using DAMROW COMPLETE EQUIPMENT When you need new equipment or replacements, find out how Damrow can help you to more profitable production.

DAMROW Intake Equipment

Completely designed, built and installed by Damrow engineers, Damrow Intake Equipment can be built to fit the needs of your plant exactly, both in capacity and floor space.

DAMROW Vapor-Film Pasteurizers

Provide faster, more uniform heating, automatically controlled temperature, prevent burnt flavor, hot spots. Assure longer service. Capacities from 50 to 1000 gallons. For Milk, Cream, Ice Cream Mix, or for use as an effective processing tank.



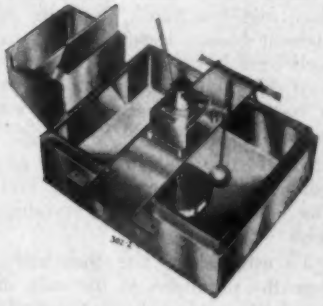
DAMROW Straightline Can Washers

Damrow Straightline Washers are recognized as the most efficient and dependable available. Six models are rated 4, 5, 6, 9, 12, and 14 cans and covers per minute. Actually each one is equal to other washers rated TWO CANS HIGHER. Ask a Damrow engineer why this is so. Let us also tell you why Damrow washers make cans cleaner, more sterile, give you longer service at less cost.

Damrow ROTARY Can Washers, in hand-operated or power types, are available in capacities of 2½, 4, 5 and 6 cans per minute. Like all Damrow Washers they use COLD AIR DRYING.

DAMROW Weighing Tanks — Suspension Type

Specially built weighing tanks with special dumping pouch and vacuum-controlled 14" valve capable of emptying 1000 lbs. in 4.4 seconds. Designed for speed and easy cleaning.



DAMROW Gravity Cold Milk Filters

Fast, economical, most efficient filter. Available in three sizes, for capacities of 5,000, 10,000 and 25,000 lbs. per hour.

DAMROW Horizontal Storage Tank with Agitator

Damrow tanks and vats are made in all sizes, shapes, designs to meet specific needs in your plant. They reflect the unusual skill, experience and craftsmanship you can always expect at Damrow.

WRITE FOR NEW DAIRY CATALOG on DAMROW COMPLETE EQUIPMENT . . . or for data on the specific equipment you need.

DAMROW BROTHERS COMPANY

204 Western Avenue **Fond du Lac, Wisconsin**

MANUFACTURERS OF EQUIPMENT FOR THE DAIRY INDUSTRY

cent milk has ranged from $3.45 per hundredweight in 1919 and 1920, down to $1.23 per hundredweight in 1932, and up again to about $3.90 per hundredweight in 1944.[1] The 4-cent butterfat differential is equivalent to 1.1 per cent of the base price for 1919 and 1920, 3.3 per cent of the base price for 1932, and 1.0 per cent of the base price for 1944.

Some Basic Principles

So long as we have such wide swings in the price level it is a fundamental error to maintain the butterfat differential at a fixed number of cents per hundredweight. The butterfat differential used in computing payments to producers should move up and down as production costs rise and fall. Numerous studies have shown that it takes more feed to produce high-test milk than to produce low-test milk. According to Morrison's feeding standards for dairy cows, it takes about 7 pounds more of digestible nutrients to produce 100 pounds of 4.5 per cent milk than is required to produce the same quantity of 3.5 per cent milk.[2] When prices rise the cost of this extra feed goes up. Likewise it takes more labor, more barn space, etc., to produce high-test milk. The milk yield of high-fat breeds is smaller and more of such cows have to be kept to obtain a given quantity. The cost of the extra labor, barn space, etc., also goes up when prices rise.

There are two main obpectives in establishing price differentials for butterfat as applied in paying producers, namely:

1. To establish a rate that will encourage the producers in the milk shed to keep sufficient numbers of cows having the different breed characteristics so that the average test of milk will be maintained at the approximate level desired by the market. (Without going into details on this point, it is the authors' conclusion that an average test of about 3.6 to 3.8 per cent is generally preferred.)

2. To provide for automatic adjustment of the butterfat differential as the price level and production costs go up or down, so that the comparative profitability of low-test and high-test cows will remain reasonably constant.

How Large Should the Differential Be?

The answer to this question may be sought in several directions. Some groups contend that the proper basis for the butterfat differential is the extra cost of producing high-test milk. This argument is logical, but it runs into two serious difficulties. In the first place, the cost of producing milk is affected by so many factors that an accurate measurement of the difference in cost of producing 4.0 per cent milk and 3.5 per cent milk exclusive of other influences is practically impossible. The other difficulty is that extra cost of producing high-test milk may exceed the amount consumers or dealers are willing to pay, especially when the test goes much above the level that has been customary in the market.

The butterfat test that has been customary in the market and the price differential which provided the inducement to maintain the butterfat content of the milk at that level are indeed important considerations. The 4-cent differential which has prevailed in the New York milk shed for 27 years is equivalent to 1.8 per cent of the average basic price paid producers during those years. The average test of the milk varied considerably during this period but is fully as high today as in 1917. This indicates that a butterfat differential equal to 1.8 per cent of the basic price, or a little less, is sufficient to maintain the test at the present level.

Professor Misner of Cornell has called attention to the fact that the energy value of Holstein milk (number of calories per cc.) increases at the rate of 1.8 per cent for each point of increase in the butterfat test.[3] For other breeds the ratio is slightly lower. The energy value is one important basis of measurement of the food value of milk. Thus the 4-cent butterfat differential which has been used in computing producer payments in New York for 27 years has reflected quite accurately for the period as a whole the differences in energy value of milk of different tests.

Butterfat Differentials in Other Large Markets

Some interesting facts are revealed by a survey of the butterfat differentials presently applied in computing producer payments in a number of the largest markets throughout the country. Two of these facts are especially significant, namely:

First, in most of these markets the butterfat differential is considerably higher than the 4 cents a point which still prevails in New York, Philadelphia, and a few others.

Second, in about two-thirds of these markets the principle of a flexible differtial, automatically adjusted as the price level moves up or down, has been adopted.

As shown in the accompanying table (table 1), New York, the Scranton-Wilkesbarre market, Philadelphia, and Milwaukee are the only places among the 20 largest markets of the entire country that still have a butterfat differential as low as 4 cents a point. In 14 of the 20 markets the differential is between 4.8 cents and 7 cents a point, and in two markets on the Pacific Coast the rate is 10 cents or higher. The average of the differentials paid in the 20 markets on milk delivered during August 1944 was 5.7 cents a point.

The fact that allowances for extra but-

[1] All milk prices mentioned in this article for the years 1943 and 1944 include the so-called "feed subsidy".

[2] **Feeds and Feeding,** by F. B. Morrison, Twentieth Edition, 1936, Appendix, Table III, p. 1004. In making this computation, it was assumed that the average weight of the cows producing 4.5 per cent milk was 900 pounds, and for those producing 3.5 per cent milk, 1150 pounds; also that the average production of each group was 285 pounds of fat per cow.

[3] Misner, E. G. **Some Methods of Computing Butterfat Price Differentials.** Mimeographed Report A. E. 459, Dept. of Agr. Econ., New York State College of Agriculture, 1943, p. 31.

IF YOUR DAIRYMEN HAVE WILSON MILK COOLERS
YOUR MILK PLANT WILL HAVE A UNIFORM SUPPLY OF

FARM—FRESH MILK

HIGH IN QUALITY • LOW IN BACTERIA

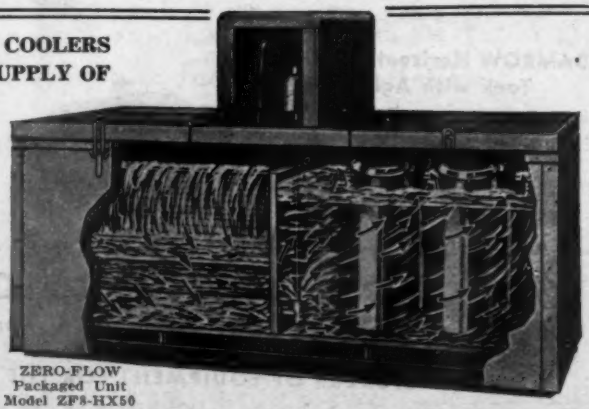
Wilson ZERO-FLOW Milk Cooler:

- Cools TWO milkings Daily FAST . . . . with its patented flowing self-leveling water-bath "neck-high" on every can automatically during cooling.
- Stores ALL Cans of BOTH Milkings . . . . Automatic storage with no rehandling of cans.

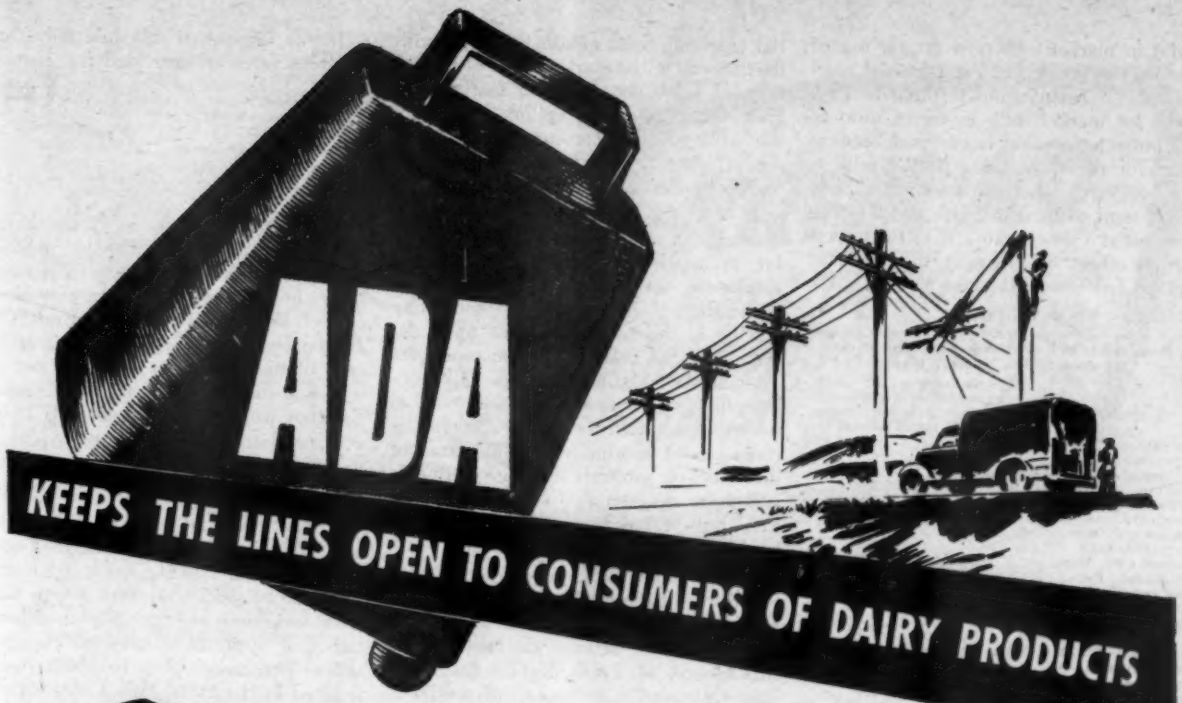
Complete information on WILSON SYSTEMS OF MILK-COOLING should be in your files. Let us send it NOW. Address Dept. 21.

WILSON CABINET COMPANY

Designers and Manufacturers of
COMMERCIAL REFRIGERATION EQUIPMENT
Smyrna Delaware



ZERO-FLOW
Packaged Unit
Model ZF8-HX50



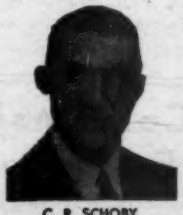
BRYCE S. LANDT, Chairman
Wisconsin Dells, Wisconsin

ADA'S Wartime Advertising Directed by this Committee

H. E. DODGE
Topeka, Kansas

B. F. BEACH
Adrian, Michigan

JOHN COOK
Chillicothe, Missouri



C. R. SCHOBY
Bode, Iowa

Only a forceful, forthright, nationwide advertising and promotion program will repair and strengthen the dairy industry's lines of distribution to the consuming public when they are broken down by the heavy storms of wartime rationing, restrictions, set-asides and shortages.

This is the kind of program, guided by the American Dairy Association and paid for by the dairy farmers of 18 states, that right now is keeping open the lines to the steady, strong markets of the postwar years ahead.

Highlights of ADA Wartime Advertising Program

1. ***"The Voice of the Dairy Farmer"*** Every Sunday over an NBC coast-to-coast network, with Clifton Utley and Everett Mitchell. This program builds public understanding of dairy problems and reminds consumers of exceptional food and flavor values of dairy products.
2. ***TIMELY Newspaper Advertising.*** Explaining the increased point values on butter, and similar wartime issues so that farmers and their dairy industry will not be unfairly blamed—because of misunderstanding—for developments over which they have no control.
3. ***Magazine Advertisements.*** Used to build future sales and to overcome the efforts of those who would destroy the markets for dairy foods. Pushing home the fact that America's economy is keyed to farm prosperity.
4. ***Strategic Billboards.*** Added impact is given to the entire program through use of colorful billboards in key locations.
5. ***Keeping Contact*** with the public and the grocer through merchandising and publicity to keep retail trade channels open and the public mindful of dairy foods.

AMERICAN DAIRY ASSOCIATION

20 N. WACKER DRIVE BUILDING · CHICAGO 6, ILLINOIS

"The Voice of the Dairy Farmer"

ADA is a federation for nation-wide promotion, advertising and research activities supported by the dairy farmers of Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, Washington, Wisconsin, Oklahoma, Utah and Idaho.

terfat in market milk now are far out of line on the up side in Pacific Coast markets also is brought out in table 1. Payment for market milk in direct ratio to the butterfat content is unsound because much of the food value of the milk is represented in the solids-not-fat. These solids tend to increase with the fat content but at a slower rate. Thus the direct-ratio method of payment discriminates against low-test producers.

TABLE 1

Price differentials for butterfat applicable to producer prices in the 20 largest markets of the United States, August, 1944

Market	Differential in cents per hundredweight for each 0.1 per cent change in butterfat test
Milwaukee, Wis.	4.0
New York, N. Y.	4.0
Philadelphia, Pa.	4.0
Scranton-Wilkesbarre, Pa.	4.0
Buffalo, N. Y.	4.8
Baltimore, Md.	5.0
Cincinnati, Ohio	5.0
Cleveland, Ohio	5.0
Kansas City, Kan.	5.0
Pittsburgh, Pa.	5.0
New Orleans, La.	5.3
Chicago, Ill.	5.5
Detroit, Mich.	5.5
St. Louis, Mo.	5.5
Minneapolis-St. Paul, Minn.	5.8
Washington, D. C.	6.0
Boston, Mass.	6.6
Providence, R. I.	7.0
San Francisco, Cal.	10.0
Los Angeles, Cal.	10.6
Average	5.7

In a recent publication, Professors Froker and Hardin of the University of Wisconsin called attention to the findings of Jacobson that in general a change of .1 pound in the fat content of milk is accompanied by a change of .04 pound in the solids-not-fat.[4] They emphasize the point that the difference in net value of the solids-not-fat as well as the difference in net value of the fat should be considered in determining the price differential for milk of different tests.

This principle is sound, especially in pricing milk for use in the manufacture of milk products, and its practical application would result in a flexible differential changing from month to month with fluctuations in the market value of butterfat and solids-not-fat. In a market-milk area, however, other factors, especially the willingness of consumers to pay for extra butterfat and solids-not-fat, have to be considered.

In 7 of the 20 largest markets of the country the price differentials for butterfat, as applied in computing returns to producers, are fixed amounts per hundredweight. In these markets any change in the rates must wait upon decisions by the directors of the producers associations, distributors, and milk control officials. Because maladjustments between prices and butterfat differentials come about gradually and because of diversity of interests among producers and their representatives, changes in the fixed butterfat differentials often lag far behind the need for such changes.

In the other 13 large markets, about two-thirds of the total number, automatic adjustment of the butterfat differential is provided for in one way or another. In Chicago, St. Louis, Kansas City, and New Orleans the butterfat differential is computed each month at a specified percentage of the wholesale price of butter. In Chicago and St. Louis, for example, the differential is computed as 12 per cent of the price per pound of 92-score butter at wholesale in Chicago. With butter at 30 cents a pound, the differential would be 3.6 cents; with butter at 45 cents a pound, the differential would be 5.4 cents.

In Cincinnati, Cleveland, and Detroit, the butter market also is used as a basis for the differential, but instead of taking a specified percentage of the butter price, a sliding scale is used. The scale used in the Detroit market is as follows:

Wholesale price per pound, 92-sc. butter at Chicago	Butterfat differential (cents per hundredweight for each 0.1 per cent change in test)
Below 25 cents	3.0
25-29.9 cents	3.5
30-34.9 cents	4.0
35-39.9 cents	4.5
40-44.9 cents	5.0
45-49.9 cents	5.5
50-54.9 cents	6.0
55-59.9 cents	6.5

In the Cincinnati schedule only three different rates are provided for, namely:

Wholesale price per pound, 92-sc. butter at Chicago	Butterfat differential (cents per hundredweight for each 0.1 per cent change in test)
30.0 cents or less	3.0
30.1-39.9 cents	4.0
40.0 cents or higher	5.0

In Boston and Providence the butterfat differential applicable to producer prices for milk is computed each month from the quoted price for cream as received by Boston dealers. Under the Boston formula the differential is 10 per cent of the following: the price per can of cream divided by 33.48, less 1½ cents. In other words, the differential is 10 per cent of the net price per pound of fat in cream after deducting an allowance for handling and transportation costs.

In two of the 20 leading markets, Buffalo and Minneapolis-St. Paul, the butterfat differential that is used in computing prices to be paid producers now is taken as a weighted average of the differentials that apply to the several classes of milk. The same plan has been incorporated in the State Milk Control Order for Rochester, New York. Under this plan, if 70 per cent of the milk were utilized in Class I (with a 4-cent differential), 20 per cent in Class II (with a 7-cent differential), and 10 per cent in Class IV (with a 5-cent differential), the weighted average would be 4.7 cents. A producer butterfat differential computed in this way will vary from month to month depending upon the utilization of the milk and also upon the differentials that apply to the various classes. In most markets, the Class I differential will play a very important part in determining the amount of the producer differential. If the Class I differential is not properly established, the producer differential will necessarily be out of adjustment.

As explained earlier, milk is purchased by dealers in San Francisco and Los Angeles (as in most western markets) at so much a pound of fat, so that the price

[4] Froker, Rudolf K., and Hardin, Clifford M. **Paying Producers for Fat and Solids-not-fat in Milk.** Wis. Agr. Exp. Res. Bul. 143 (revised), 1942. Jacobson, Moses. **Butterfat and Total Solids in New England Farmers' Milk as Delivered to Processing Plants.** Journal of Dairy Science, Vol. 17, pp. 171-176, 1936.

Spray Process Dryers

Continuous or Batch Operation for drying

MILK, EGGS AND OTHER FOODS

FULL RECOVERY OF SOLIDS

Economical Operation

High Temperature Cream Pasteurizers

—o—

Hotwells

Condensing Equipment

with efficient entrainment separator

Designed to produce highest quality

CONCENTRATED SKIMMILK

WHOLE MILK

ICE CREAM MIX

BUTTERMILK

—o—

Ask us for Location of Nearest Installation

C. E. ROGERS COMPANY **8731 Witt Street, Detroit, 9 Mich.**

KRIM-KO GETS THE CALL FROM WAR WORKERS ON MY ROUTE!

Says J. M. Nolan, Chicago driver for Sidney Wanzer & Sons

"Krim-Ko is rapidly becoming the favorite dairy drink with war workers on my route," says J. M. Nolan, Chicago driver for Sidney Wanzer & Sons. "For example, it's close to noon and I'm waiting out in front of one of the big war plants with three competitors also open for business. There we are with our goods all iced and piled up in cases on the sidewalk just like four open-air stores.

"Well—it would do your heart good to see the workers run out and line up in front of my stack of cases. I sell more than the three other milkmen put together—and 60% of my sales is good old Krim-Ko. I'll say it's a 2-to-1 favorite!"

Yes, war workers, school children, men in our armed services, people everywhere have voted KRIM-KO best-tasting chocolate dairy drink by a 2-to-1 majority. They like its delicious chocolate flavor, its richness, its good taste. To keep KRIM-KO taste-test champion is the job of the KRIM-KO specialists in the great modern KRIM-KO laboratory. A folder completely describing this remarkable laboratory is yours for the asking. Just drop a letter or post card to KRIM-KO, Dept. 427, 4830 S. Christiana Ave., Chicago 32, Illinois.

SCENE AT CHICAGO WAR PLANT WHERE WORKERS STAND IN LINE FOR DAIRY REFRESHMENT . . . THE PREFERENCE FOR DELICIOUS KRIM-KO IS 2 TO 1

paid per hundredweight is in direct ratio to the butterfat test.

Although not used in any of the 20 largest markets, another device for automatic adjustment of the butterfat differential which might well be considered involves the use of a constant percentage of the price to producers or of a schedule based on the producers' price. With a schedule, more moderate fluctuation than with the use of a constant percentage could be provided for if desired. This may be illustrated as follows:

Base price per hundredweight for 3.5 per cent milk	Butterfat differential in cents per hundredweight
Under $1.50	3.0
$1.50-1.99	3.5
$2.00-2.49	4.0
$2.50-2.99	4.5
$3.00-3.49	5.0
$3.50-4.00	5.5
More than $4.00	6.0

With the particular schedule illustrated here, the butterfat differentials indicated to be used at the higher price levels would represent smaller percentages of the base price than those to be used when the prices are lower. This may be desirable because there may be some resistance to differentials that vary as much from the accustomed rate as would be the case if a uniform percentage of the base price were applied throughout the complete range of prices.

In practice, either a schedule similar to the one illustrated here or a constant percentage could be applied to the price for the preceding month rather than to the price for the current month. In this way the differential could be determined in advance of the computation of the base or pool price for the current month.

In August 1944, 14 of the leading milk markets of the country used the same butterfat differential in computing producer payments as in billing Class I milk to dealers. New York was one of these. In Philadelphia, Washington, Cincinnati, and Kansas City, the Class I differential was higher than the producer differential, while in Buffalo and the Minneapolis-St. Paul market, the producer differential was higher.

In a milk shed where a high percentage of the milk produced is used for Class I sales, it is obvious that the butterfat differentials applied to Class I and to the producer price should be about the same. On the other hand, in a milkshed such as the New York area where a substantial part of the milk is used for cream and manufactured products, the producer differential may well reflect the payments for extra butterfat in the milk used for such purposes. In such instances there is much to be said in favor of using as the producer differential an average of the differentials that apply to the several classes of milk, as is now done in Buffalo and in the Minneapolis-St. Paul market.

In 1930, the average of the butterfat differentials used in computing producer payments in the 20 large markets was 4.9 cents; in 1933, 3.9 cents; in 1941, 4.5 cents; and in the first 8 months of 1944, 5.6 cents. New York, Scranton-Wilkesbarre, Philadelphia, Cincinnati, and Milwaukee are the only markets in the group that are using the same differential in 1944 as was used in 1930.

How an Increase in the Butterfat Differential Would Affect Returns to Producers

The butterfat differential that is used in computing payments to individual producers has no effect upon the total returns to all producers nor upon the average price received by all producers. In any market where a pooling plan is in effect an increase in the producer butterfat differential will result in somewhat larger returns to those whose milk tests above the average and in somewhat smaller returns to those whose milk tests below the average. Producers of average-test milk will neither gain nor lose.

In the New York milk shed the prices announced apply to milk of 3.5 per cent butterfat content. In 1943 the average butterfat test of the milk was approximately 3.8 per cent. If the differential were raised from 4 cents to 5 cents a point, the additional premiums to be paid the producers of milk testing above 3.5 per cent would be equivalent to 3 cents per hundredweight on the entire supply. In other words the announced price would be 3 cents lower, and only those producers whose milk tests above 3.8 would benefit from the change. Producers whose milk tests below 3.8 per cent would receive somewhat less than before.

Approximately equal numbers of producers produce milk testing above the average and below the average. The number of high-test producers is slightly larger than the number of low-test producers but the high-test herds are smaller.

Conclusions

The authors of this article believe that a butterfat differential equivalent to about 1.5 per cent to 1.8 per cent of the base price for 3.5 per cent milk would be sufficient to maintain the average test of milk produced in the New York milk shed at approximately the present level. Unless the differential is raised soon a noticeable decline in the test may be expected. The decline in butterfat tests will come about, of course, through a gradual reduction in the number of cows of high-butterfat breeds, and less attention to the butterfat test in selecting heifers to be raised.

In order to avoid a repetition of maladjustments in the butterfat differential with alternating discrimination against high-test and low-test producers, it is very desirable that some plan for automatic raising and lowering of the differential be adopted. Several useful devices for this purpose have been illustrated in the foregoing discussion.

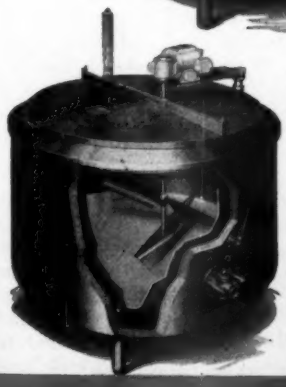
PLAN NEW MILK PLANT

Branson, Mo. — A cooperative milk cessing plant in Taney County is taking form. Ways and means to establish the plant are being discussed.

KURLY KATE
METAL SPONGES
Designed especially for cleaning all types of dairy equipment and utensils. Will not rust or splinter, cut the hands or injure metal or plated surfaces. Kurly Kate Metal Sponges are fast working, easy to use, and easy to keep clean. Made in STAINLESS STEEL, NICKEL SILVER and BRONZE.
ORDER FROM YOUR JOBBER OR WRITE DIRECT
KURLY KATE CORPORATION
2215 S. MICHIGAN AVE. CHICAGO 16, ILL.

The ARISTOCRAT of PASTEURIZERS

In certain areas, space heaters are compulsory. Illustration shows the PURITY SENIOR equipped with space heater built in accordance with U.S.P.H.S. milk ordinance and code, and certain modifications to meet specific board of health requirements.



Sectional view of the PURITY SENIOR, showing the powerful yet gentle inclined-blade propeller type agitator; also construction of inner and outer shell, and the water chamber.

THE O. & B. PURITY SENIOR is built throughout along lines which are truly Aristocratic and DeLuxe.

Possessing every advantage and operating feature of our Sixtieth Anniversary Model, it is also much more solidly built, being constructed in every respect of heavier materials. It is an exceptionally handsome machine; and the most up-to-the-minute milk man could ask for nothing finer or more durable. It is the installation "par excellence" for the "show plant." Completely encased in polished stainless steel.

Insulated with an inch of pure corkboard, it is equally desirable with either milk, cream, or ice cream mix. Very fast heating, and produces a deep cream line, with fine flavor. The inner vat is of ground and polished stainless steel, 5/64 inch thick, and is entirely surrounded on sides and bottom with hot water. It is therefore a very fast machine. This prevents off-flavor and burning on.

Solid 1-piece welded breast. Brass pipe, and bronze heater-circulators of our own design. A new feature is the handsome pitched cover and an instantly demountable hinge which permits both halves of the cover to be lifted off independently and instantly. Agitator is direct connected to splash-proof motor with reduction gears integral.

We manufacture complete lines of Pasteurizers, both Round and Rectangular. We have or can promptly fabricate just what you need. You'll be glad you bought a PURITY.

OAKES & BURGER CO. Inc.

Factory & Office · CATTARAUGUS, NEW YORK

Branch · · · · YOUNGSTOWN, OHIO, U.S.A.

Established 1873 · More Than Seventy Years of Honest Equipment

Present and Future
Production Problems
in the New York Shed

Dr. C. J. Blanford, Administrator of the New York Metropolitan Marketing Area, Interestingly Analyzes Recent and Current Trends in the Milk Picture*

AS WE READ our newspapers these days, we are filled with a sense of victory. The continuing success of our armed forces in Europe and the Pacific lifts our pride and our pleasure to new levels. The temptation to say that "it's all over" is hard to resist. Nevertheless, it is too early to toss up our hats. We must push ahead with our wartime work. But it is not too soon to sum up the performance of the dairy industry in the service of the Nation at war. If the summing up reveals the pattern of some post-war dairy problems, so much the better to be forewarned.

We can't pretend, of course, to spot each and every post-war difficulty at this time. The best we can do now is to suggest, in the light of current conditions, where the "trouble areas" will be. The dairy industry is nearing the end of its third full year on war footing. Those three years plus the pre-war year of 1941 have seen great changes in the industry. They have been years of hard work well done, and the industry—from producers straight down the line—has written a record of remarkable achievements. But those years likewise constitute a continuous period in which wartime conditions of production, wartime requirements for milk and dairy products, and wartime regulation of prices, consumption, and industrial materials have applied extreme pressures to the industry. The weight of all those factors was bound to alter the industry. Those changes are with us now, and in them and through them we can see some of the problems of the post-war dairy world.

Dr. Charles J. Blanford

What problems will be the most troublesome is a 64-dollar question. Even self-confessed experts would take pains to hedge an answer to that. The degree to which one difficulty would be more intense than another defies definition. For that matter, the problems themselves cannot be set forth as precisely as an equation in algebra. As I said earlier, we can no more than outline certain "trouble areas."

Chief Interest of Sanitarians

As milk sanitarians, your interest, of course, is centered in the production of milk and milk products for inspected sale. Fluid milk, fluid cream, cream for ice cream, and a variety of lesser products fall within that field. Local governments usually maintain supervision and inspection over those products from the point of production to consumer purchase. You are concerned, therefore, in the problems relating directly to the production and distribution of fluid milk and other inspected products.

Milk sanitarians, more often than not, are responsible for the maintenance of an adequate milk supply. It follows, therefore, that the sanitarian is, or, at any rate, should be a practical economist. Milk supply problems over the past 12 years have had an economic complexity outweighing the question of sanitary control. Speaking by and large and with particular reference to the New York metropolitan supply, sanitation was the chief dairy problem in the 60 years preceding the early 1930's. The economics of milk has been a perennial headache for the sanitarian since that time. I should be remiss if I did not add that the various sanitary regulations of the urban communities of the Northeast form a problem of no little perplexity for the milk economist.

Sanitary control at the city level contains in itself a problem of increasing gravity. Independent city control admits such a diversity in regulations that some smaller communities, by stubborn insistence on this or that peculiar regulation, may regulate itself right out of milk in the short production months of November and December. That result is well within the range of possibilities. Uniformity in sanitary controls, however, would go a long way toward preventing artificial shortages of that kind.

Long-distance shipments of fluid milk are commonplace in the solution of wartime problems of supply. Milk from Minnesota comes to the door of Washington homes. The New York-to-Florida run has been advertised in magazines of national circulation. The long-range haul, however, is apt to become a wartime memory. If the South holds its new purchasing power and its new population, the likely result is the enlargement of local milksheds. But the long haul will remain as an example to challenge advocates of restricted markets and compact milksheds.

This war, like all wars, has been a hothouse in which new inventions and new products have surged quickly to maturity. The use of whole milk powder, skimmilk powder, and powdered ice cream mix—to mention a few—has expanded many times. We can expect their commercial exploitation in the post-war period. Whether the use of fluid milk and inspected cream will be displaced to a marked extent is for others to predict. But I venture to say that fluid milk handlers and ice cream manufacturers should look forward to new and interesting competition.

(Please turn to page 314)

*Full text of an address delivered by Dr. Blanford before the Twenty-second Annual Conference of the New York State Association of Milk Sanitarians, held at Syracuse, N. Y., on September 21, 1944.

THE SHOW MUST GO ON!

We all hope that victorious peace will be with us soon. We shall then meet again to greet one another at the Dairy Industries Exposition. Meanwhile, we are having our biggest show of all. We continue our full effort at war work and the production of essential dairy equipment for the milk dealers of our nation.

Many items of equipment are available for prompt shipment. How best can we serve you?

Write for Catalog D-44.

GIRTON MANUFACTURING CO.
MILLVILLE, PA.

Using Our Separator

Items of Interest Skimmed From Here and There

Pneumatic Tires

ONE OF THE MOST comprehensive manuals on the design and construction of pneumatic tires ever issued has been published for United States Army training schools by The B. F. Goodrich Company and is now also available to civilians interested in the subject. Copies may be obtained upon request to the principal headquarters of the company in Akron, Ohio.

Consisting of 50 well illustrated pages, the manual discusses the basic principles of pneumatic tire design, including pictured descriptions of the role which each part of the tire plays in its operation and how tires are manufactured.

Measurements and other data on each of the important classifications of heavy duty military and civilian tires, and proposed load and inflation table for them are one of the features of the publication, together with tube, valve, flap and rim data.

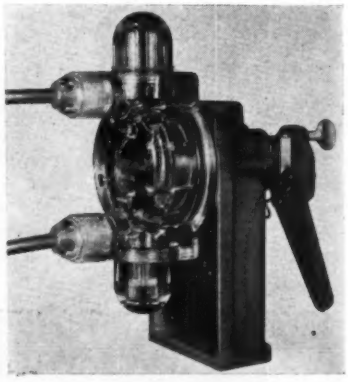
The Goodrich company has also just published a chart which can be used as a wall poster as a constant reminder of the necessity for tire care. Any reasonable quantities from fleet operators or truck owners can be obtained upon request.

Graphically picturing the subject, the chart gives seven rules for tire care. They are Don't Overload; Don't Exceed Victory Speed; Don't Overinflate; Don't Underinflate; Duals Must be Twins; Drive Carefully; and Correct Mechanical Defects.

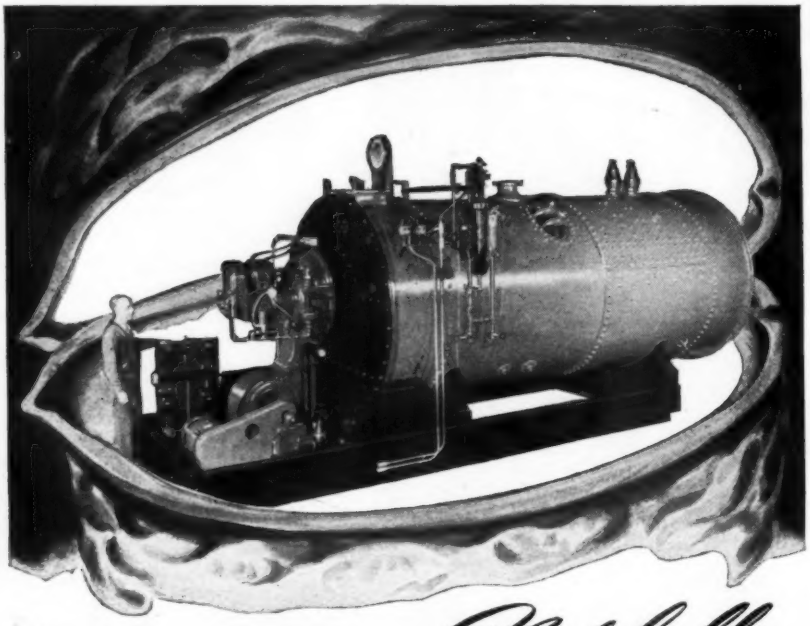
Proportioneers

PROPORTIONEERS, INC., have announced the development of a small chemical feeder called "Chem-O-Shot". This unit is specially designed for installation on standard bottle washers and can washers to feed all chemical solutions now used for cleaning and sterilizing.

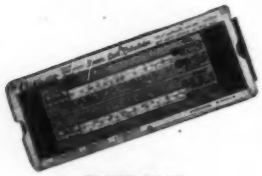
Chem-O-Shot is sold as a complete kit with full installation accessories furnished so the unit may be installed without the purchase or manufacture of additional parts; even the reagent tank is furnished with the kit. Both tank and feeder are mounted on a universal mounting bracket. Chem-O-Shot is a lever- operated chemical feeder designed to work from a reciprocating rod or crank.



This unit is equipped with the same type expensive "See-Thru" plastic head construction as %Proportioneers% larger chemical feeders used in chemical process plants and municipal water works. Because "See-Thru" construction allows the operator to look inside of Chem-O-Shot and see the chemical as it is pumped, as well as view all the moving parts coming in contact with the chemical solution, it is very easy to keep the unit operating at maximum efficiency.



A Steam Plant in a *Nutshell*



INSTANT STEAM-COST CALCULATOR

Write for this instant steam cost calculator. Yours for the asking. Figures steam costs for oil or coal.

"THERE it is in a nutshell" . . . the most compact means for generating steam for heat, power, or processing . . . the Cleaver-Brooks steam generator . . . a self-contained steam unit shipped in complete "packaged" form ready to set down on the floor and connect to water, oil and steam lines.

Cleanliness in operation is an outstanding feature of the Cleaver-Brooks steam generator. There is no ash, dirt, soot or smoke. The Cleaver-Brooks steam generator sets a new high in fuel economy. (Thermal efficiency of better than 80% guaranteed.) Steam comes fast and in large volume.

In a nutshell, Cleaver-Brooks steam generators give low cost steam with the least demand on the plant operating force for installation, operation, or maintenance. Sizes from 15 to 500 bhp., steam pressures from 15 to 200 lbs.

CLEAVER-BROOKS CO.

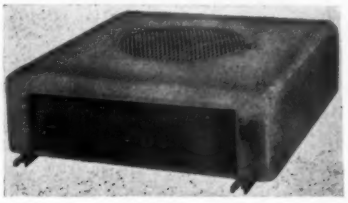
5137 N. 33rd St., Milwaukee 9, Wis.

Cleaver-Brooks STEAM GENERATORS

Full instructions for installing Chem-O-Shot and its many applications may be secured by writing to the manufacturer, %Proportioneers, Inc.,% 100 Codding St., Providence, R. I.

Unit Coolers

TO MEET the requirements for cleanliness and attractive appearance in ceiling-type horizontal coolers for cold rooms and large refrigerators, a new series of Spasaver air coolers, housed in streamlined white enamel



cabinets, suitable for all refrigerants and ready for installation, is offered by Drayer-Hanson, Inc., Los Angeles 21, California.

Models in ten different sizes are available for use in institutions, food processing plants and similar fields.

Equipped with new type propellor fans, units operate with practically no noise. Coils are of the fin and tube type, equipped with exclusive D & H kinetic type refrigerant distributor.

Informational catalog with complete specifications and performance data is available upon request to the manufacturer.

Steam Mixer

COMPACT AND EASY to install, the new O'Brien steam mixer water heater is described as a complete packaged unit, including heater, temperature regulator, temperature-pressure relief valve, thermometer and, where necessary or desired, water pressure regulator and steam and water pressure gauges.

Employing a new muffler-diffuser type mixing nozzle, this heater is said to be efficient and quiet. In addition to the heat of the steam delivered to the water the condensate itself is utilized as hot water. There is no waste of condensate, and no condensation return system is required. The unit is designed for steam pressures of 50 to 150 lbs.

The manufacturer states that the heater can be easily installed near the point of use to deliver an adequate supply of hot water at controlled temperatures. Steam pipe sizes range from ½ to 1½ inches, with capacities ranging up to 5,500 G.P.H. There is also a wide selection of temperature ranges available, making the unit practical as either a primary or booster heater.

Full particulars and prices may be obtained by writing to O'Brien Steam Specialty Co., Dept. 22, 205 Harrison St., Syracuse 2, N. Y.

pH Tablets

A SAMPLE (5.00 pH) of the new Coleman buffer tablet will be supplied to any chemist who requests it on his company letterhead. The sample tablet has a pH of exactly 5.00 pH when diluted in 100 ml. of warm distilled water. The Coleman pH Buffer Tablet provides a simple and accurate method of preparing buffer solutions for the laboratory.

These buffer tablets are available in steps of 0.20 pH over the range of 2.00 to 12.00 pH. Twelve tablets of the same pH are hermetically sealed in a glass vial. An accurate buffer solution can be prepared quickly and economically by merely dropping one buffer tablet in 100 ml. of warm distilled water. The resulting solution will be accurate within 0.20 pH.

These tablets are manufactured by Burrell Technical Supply Company, 1936-42 Fifth Ave., Pittsburgh, Pa.

Buy War Bonds & Stamps

FOR HIGH-SPEED DAIRY SANITIZING

QUICK

Easy-to-use — simple-to-handle . . . Lo-Bax dissolves quickly in hot or *cold* water to form a *clear,* fast-killing dairy rinse solution. No need for scalding temperatures that may warp metal and break glass lined tanks. Fast and dependable in action — containing 50% available chlorine . . . Lo-Bax retains its full strength far beyond the normal period of use. Yet,

EFFECTIVE

Lo-Bax is so economical it can be used freely on walls and floors as well as plant equipment and containers.

Your producers, too, will find Lo-Bax ideal

ECONOMICAL

for better dairy sanitizing. Write today for information.

Mathieson
LO-BAX
CHLORINE BACTERICIDE

MATHIESON ALKALI WORKS (Inc.) 60 EAST 42nd STREET, NEW YORK, N. Y.
Lo-Bax . . . Super-Nufos . . . H T H-15 . . . Dry Ice . . . Carbonic Gas . . . Ammonia, Anhydrous & Aqua . . . Caustic Soda . . . Soda Ash . . . Bicarbonate of Soda . . . Liquid Chlorine . . . Bleaching Powder . . . PH-Plus . . . Synthetic Salt Cake . . . Sodium Chlorite Products . . . Sodium Methylate

The illustrations which we present herewith as an accompaniment to Dr. Blanford's analysis of the current and possible future milk marketing trends in the New York Shed show representative scenes depicting some of the essential steps in the complex task of getting the production of our dairy herds through to the ultimate consumer in pure, wholesome and health-giving form.

Production Problems

(Continued from Page 310)

New York Shed Situation Analyzed

Here in the New York milkshed, a production area spanning six states, we can escape the realm of opinion. We can deal in granite facts in surveying our present day condition. The impact of the war, in all its primary, secondary, and even more remote effects, has produced significant alterations. Those who are analytical in thinking will find it convenient to group them as 1, changes in consumption and 2, changes in production.

Increased consumption of fluid milk is perhaps the most striking effect of the war. Consumption, in fact, had climbed last year to the point where the War Food Administration, fearing for its continued success in procuring dairy products, applied stringent curbs against further expansion. Fluid sales in the New York market, including Northern New Jersey, are running 19 per cent higher than in 1940. In other markets, with net increases in population and greater concentrations of war industries, increases in fluid sales have been more startling. Nevertheless, the prospect that the New York-New Jersey market would require 326 million pounds a month would have been unbelievable in 1940. Yet that amount is our current utilization in contrast with 275 million pounds in the average month of 1940.

Whether fluid cream sales likewise would have risen at a parallel rate is a nice point for conversation. Cream was

Conveyorized equipment speeds unloading at the plant

FOR YOUR MODERNIZED PLANT....*TODAY or AFTER THE WAR....*

Quality and low production costs will be the keynote of post-war competitive conditions. You can effectively meet this challenge with highly efficient quality-producing Kaestner Faultless Equipment.

The Von Gunten Filter gives you a dependably clean milk supply — the first step to quality products. Foreign matter continuously drops from the underside of the filter cloth to the sediment trap making the Von Gunten Filter practically self-cleaning. This system prevents incoming milk or cream from being forced through accumulated sediment deposits and substantially increases the efficiency and life of the filter cloth. For fine flavor and perfect pasteurization, install a Faultless Multi-Purpose Utility Pasteurizer. In this four-in-one machine heating, holding, and cooling are done in sequence without removing the product. Flavor and a deep cream line are safeguarded through the use of low temperature hot water which circulates uniformly around the vat and provides a rapid and even transfer of heat at all points. Finest workmanship in every detail. Made in four sizes from 50 to 300 gallons.

KAESTNER *FAULTLESS EQUIPMENT*

VON GUNTEN MILK *and* CREAM FILTER

FAULTLESS MULTI-PURPOSE UTILITY PASTEURIZER

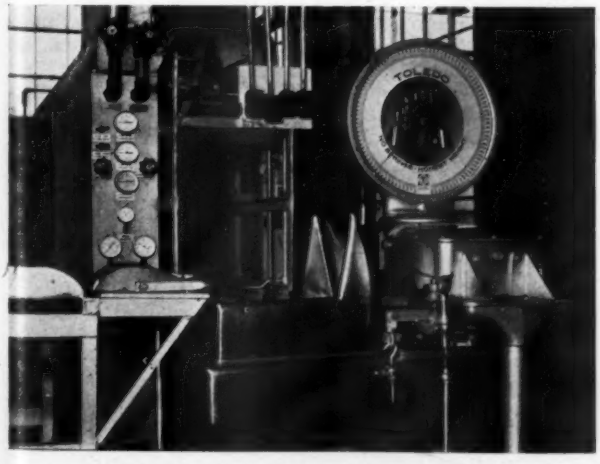
THE E. A. KAESTNER CO., 520 N. CALVERT ST., BALTIMORE 2, MD.

Sediment testing before "dumping" insures cleanliness

not given the opportunity. The first of all wartime regulations restricting the consumer sale of any dairy product was clamped on cream. Sales of cream in excess of 19 per cent butterfat were forbidden. In markets like New York, where heavy cream, ranging around 40 per cent butterfat, was the predominant product, the regulation shifted a substantial quantity of butterfat to other uses. Thus, in June 1943, when sales of fluid milk in the New York market were 14 per cent above the 1940-mark, the amount of whole milk required to satisfy cream requirements was 54 per cent less than in 1940. Combining the increase in fluid milk with the decrease in fluid cream, we find that the New York requirements were supplied in June 1943 by 5 per cent less whole milk than was needed three years earlier. Application of milk conservation quotas with June 1943 as the base has further restrained fluid cream sales. Cream quotas, except in the 1944 fluid production months, have been figured at 75 per cent of the output in June 1943. As I pointed out earlier, a conservation of 54 per cent in terms of whole milk already has been effected.

Cream Restrictions Effective

In several Northeastern markets restrictions on the sale of cream, with a consequent reduction in the use of milk, have more than counter-balanced the expansion of fluid milk consumption. Cream regulations have no doubt proved irksome, but the curtailment has contributed in a large degree



Automatic can washing and weighing increase plant output

The MONO-GRAM

NOTES AND COMMENTS ON THE DAIRY AND ICE CREAM INDUSTRY

Published in the interest of the trade
MONO SERVICE CO., NEWARK 4, N. J.

It used to be corn on the cob. With butter smeared all over your face. Then you knew you were in the good old U.S.A. Now it is ice cream that is the badge of America. The repatriates on shipboard go wild over their first sight and taste of ice cream.

"Seven miles to New Delhi, but we walked it for a taste of ice cream." Never grow up, away from ice cream, we Americans. "Palestine looked good to me. My first ice cream cone since leaving the U. S." Needless to name the favorite food! From general down to lowliest buck private, they go for it.

"Nothing new under the sun." Still true. We thought all the astonishing things being made from milk via casein were new. Brand, spandy new. And then we found out that the adhesive properties of casein were known—that Holstein cow putting one over on us again—to the ancient craftsmen. In Greece and Rome, in China and in Egypt they knew all about it, made glue and paints from casein.

But those ancients missed one trick. They didn't have any MONO KUPS to keep their glue in. Mono thought that one up for the aircraft industry. Bands of color decorate the Kups, one for each shift during the twenty-four hours. That avoids any possibility of using too old glue. Because of their lightness, strength and low cost, they are proving remarkably efficient in their new role.

Who'd ever think handsome, dainty paper cups and containers would be serving on battle and production lines? Breathtaking when you stop to think they're the self-same purveyors that have helped zoom Cottage Cheese (remember when it was called Schmer Kase?) and Ice Cream to the head of the dairy class.

Once a cow jumped over the moon. That seems to be a historical fact. And now the news claims a cow at a rodeo jumped into the lap of a lady spectator. "Ridiculous," protests an outraged Elsie. "No cow would be that undignified. Even in this age of unpredictable grandmothers."

Nebraska certainly knows *cottage cheese.* Why didn't we think of them in our quest for the past history of *cottage cheese?*

Coals of fire! They sent us a jar of cheese. And can they do fancy things with cottage cheese. They add carrots and celery and green pepper and chives to it. The result is a bit of gastronomic heaven.

Mono Service Co. Newark 4, N. J.

No. 6—Copyright 1944

DAMP-TEX
ENAMEL
FOR WET
EQUIPMENT
and WALLS
FRIEND
OF THE PLANT
OWNER... WHO HAS
A WET SURFACE
MAINTENANCE PROBLEM
The Damp-Tex system of painting kills rust, rot, fungus and bacteria. Stops deterioration. Can be applied on any paintable surface, wet or dry, with equal ease and efficiency... changing dingy, rough light-blotter interiors into glistening porcelain-like beauty. One coat covers. Resists acid, alkali, corrosive gases and oxidation. Dries overnight without flavor-tainting odor into waterproof film. Comes in white and colors.
Write for our trial offer.
LIQUID PORCELAIN-LIKE
DAMP-TEX FOR
WET
OR DRY
SURFACES
STEELCOTE MFG. CO. • ST. LOUIS, MO.
THE CREAMERY PACKAGE MFG. CO.
National Distributor of Damp-Tex
Products to the Dairy Industry.
General Office: 1243 W. Washington Blvd., Chicago
Branches in eighteen principal cities

to the solution of the problem of stretching short season supplies to meet market requirements. Without the cream reduction, severe shortages would have occurred in many markets in New York and neighboring states.

Again in November, when production has dipped to its seasonal low, the cream regulations should prove their value. The prospect, nevertheless, is less promising than a year ago. The pessimism arises, in part, from the continued increase in the demand for fluid milk. In November 1943, when conservation quotas were first effective, combined sales of all handlers in the New York-New Jersey area were 92 per cent of the market's quota. A slackening in demand from the June peak—the base for all quotas—was clearly evident. Nevertheless some handlers found it difficult to obtain supplies to fill the lessened demand. So far this year, however, fluid milk sales have been generally at a higher level than last year. Pressure against the sales limit has been heavy. It is probable, in view of current demands, that the market could use more fluid milk this November.

Modern laboratory for sanitary control and research

New York, of course, has not been the only market where consumption has increased. New York's gain of 19 per cent over 1940 is modest in comparison with other markets. A general expansion in the fluid milk requirements of Atlantic seaboard markets ate up local surpluses as early as 1942. As these markets, one by one, ran out of milk the New York milkshed became their Promised Land—a land flowing with an abundance of milk. It was, in fact, the only area in the East with a large excess supply. The rate at which the other markets purchased New York milk is demonstrated in the following comparison.

In 1941, the New York pool accounted for 313 million pounds of fluid milk sold elsewhere than in the marketing area. The amount of New York pool milk so consigned in 1943—two years later—reached a total of 545 million pounds. As large as that percentage is, it does not measure the total drain on the New York milkshed. As early as 1941, plants were removed from the New York pool in order to supply other fluid markets. The intake of the withdrawn plants, could it be counted, would sky-rocket the increase far above the cited 70 per cent.

Pool Has Lost Many Plants

The New York pool has lost a total of 46 plants since 1940 when 498 were under the inspection of the New York

Tested With Hot Fat, Patapar Shows No Penetration

Pour melted fat on Patapar... turn sheet over. No penetration.

Keeps Fatty Foods Fresh, Appetizing

Pour hot fat on Patapar. Let it stand several days, then turn the sheet over and note clean under-surface. No penetration.

It's this power of resistance that has brought Patapar the job of protecting many food products. Packaged with Patapar, foods such as butter, shortening, bacon are kept fresh, appetizing.

Boiled, It Comes Out Firm, Strong

High wet-strength is another great Patapar feature. Imagine a paper that can be immersed in boiling water for hours and come out firm and strong. Patapar will do exactly that.

Here are some of Patapar's many uses:

Butter wrappers
Tub liners and circles
Printer box liners
Bulk corrugated box liners
Milk can gaskets
Milk bottle hoods
Cheese wrappers and liners
Ice cream flavor labels

Complete Printing Service

Printing in one or more colors is part of the complete wrapper service available to Patapar customers. Our plants are equipped with modern facilities for printing Patapar by letterpress or offset lithography. We handle every detail, from original art design to the delivered job.

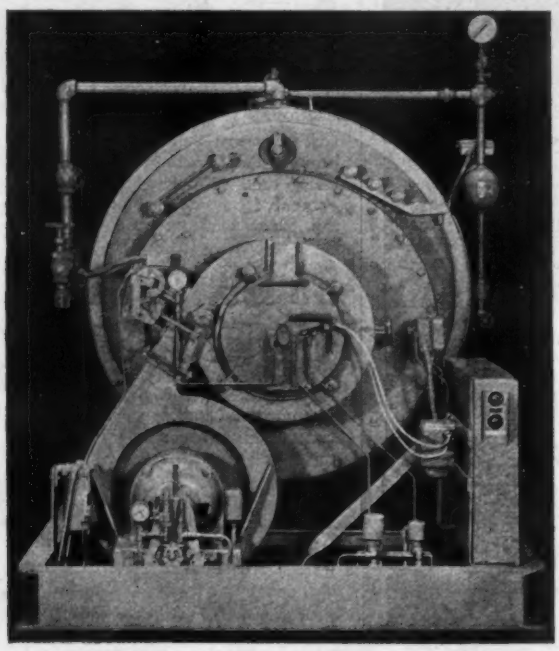
Patapar Keymark

This little Keymark is the nationally advertised symbol of wrapper protection. It can be included on printed Patapar at no extra cost. On your wrappers, it tells customers that you are giving your product the best possible wrapper protection.

Patapar
Reg. U. S. Pat. Off.
Vegetable Parchment

Paterson Parchment Paper Company
Bristol, Pennsylvania
West Coast Plant: 340 Bryant St., San Francisco 7, Cal.
Branch Offices: 120 Broadway, New York 5, N. Y.
111 West Washington Street, Chicago 2, Ill.
Headquarters for Vegetable Parchment since 1885

DOLLAR EFFICIENCY—work done per dollar spent—measures the value of steam generation



Ready accessibility to controls and guages, all of which are mounted on the unit's front, is a feature of the 100-horsepower Cyclotherm Steam Generator shown above.

This unit, like all Cyclotherms, operates on exclusive principles of combustion and design that provide high efficiency at low cost of operation.

Cyclotherms are fully automatic and completely self-contained. They are both oil and gas fired in a power range from 10 to 300 horsepower.

Commercial deliveries are being made as rapidly as the press of Government orders permits. If you are planning immediate replacement, our engineers will be glad to cooperate in meeting your needs. Additional information gladly sent upon request.

CYCLOTHERM
STEAM GENERATOR

AMES IRON WORKS
OSWEGO . . NEW YORK . . BOX 512

City and Westchester health departments. At present, the pool represents the volume of milk received at 450 plants. Plants quit the pool at the rate of 14 in 1941, 15 in 1942, and 13 in 1943. With only 4 exits so far in 1944, it would seem perhaps that we have hit the bottom. Withdrawals, however, have shown a seasonal pattern with the peak in the short production period. The coincidence of the heaviest demand for fluid milk and the heaviest pool obligation for outside consignments is a persuasive reason for withdrawing in the short season. The last four months of 1944 will tell whether the migration of plants has stopped.

What markets these plants will supply in the post-war period is an interesting speculation. Of course, their ultimate fate depends to some extent on economic conditions in their present markets. The distance between the plants and their markets, an important factor in determining the total cost of the milk, will likewise affect the position of the suppliers. Plant operators foresighted enough to require a 10-year sales contract have, however, little reason to worry.

With 46 fewer plants in the pool it follows, of course, that the available supply of approved milk has declined. More than a few handlers, especially those without their own country sources of supply, have found it more difficult to buy their

Streamlined pasteurization for efficiency and safeguarding the product

requirements. The out-of-pool movement of plants has squeezed any winter surplus from the New York pool.

The reduction in pool plants, moreover, was paralleled by a striking decline in the number of producers. Pool plant deliveries came from 60,300 dairy farmers in the average month of 1940. Four years later, in June 1944, the pool intake was the production of 51,500 farms. The net loss in producers has been 8,800. However, it has been a net loss only insofar as the New York pool is concerned. The figure—8,800 fewer dairy farmers in the pool—should not be taken confusingly to mean that 8,800 farmers have quit production. Each of 46 plants removed from the pool carried with it, in a body, the producers supplying the plant. More than half the reduction in producers can be attributed to plant withdrawals. In addition, producers in sizable numbers left the pool individually. Those farmers are now supplying markets in Connecticut, New Jersey, and Upstate. A thorough sifting of the figures would reveal that the decrease in dairy farming has been smaller than is generally believed.

New York Market Supply Reduced

Regardless of where the producers have gone, the decline—a decrease of 15 per cent in 4 years—has reduced the market's supply. It is interesting to note that the loss of producers has been largest in the milkshed areas outside New York State. By June 1944—in comparison, of course, with 1940—New Jersey had revealed a reduction of 50 per cent, Connecticut and Massachusetts 42 per cent, and Vermont and Pennsylvania 18 per cent. The decline in New York, however, was 12 per cent, with Western New York's decrease of 32 per cent as the peak for the State.

With the greatest decrease in New Jersey, Connecticut

Gamble if you will—but not on CLOSURES!

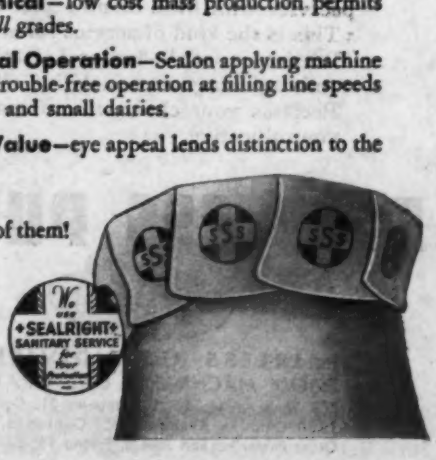
You can "see by the papers" that the time is fast approaching when closure equipment may again become available. Then watch the demand for hood protection pour over the dam!

Now is the time to get set on the closure you're going to use.

To help you take the gamble out of selecting the *right* closure, Sealright gives you 14 solid facts to use as a yardstick by which to measure all closure claims. Read them below. They'll help you separate fact from fancy—and they'll tell you why so many progressive dairies already have their orders in for Sealright equipment for delivery "when the day comes"!

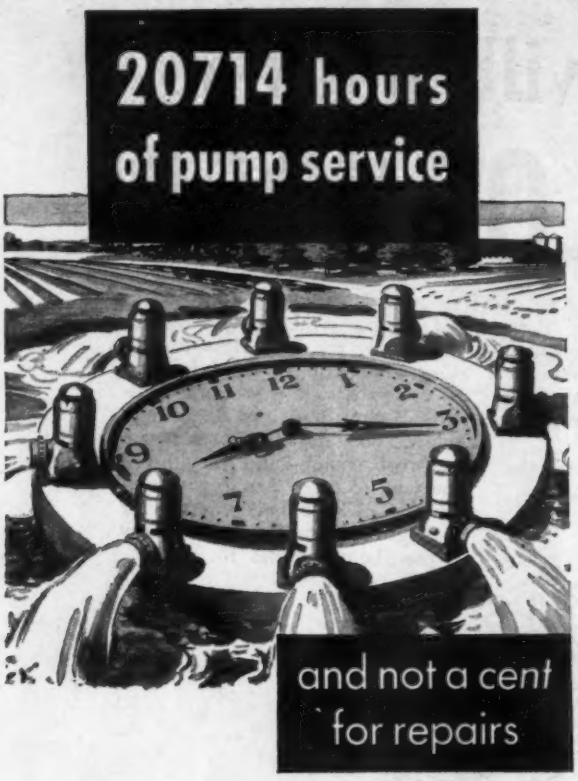
1. **100% protection** for entire pouring lip.
2. **Sterilized** by 500° F. temperature at time of application.
3. **Tamperproof**—cannot be removed without breaking pleats that seal it.
4. **Odorless, tasteless, non-toxic, non-porous** because of new plastic coating of paper.
5. **Waterproof**—impervious to melting ice, rain or snow.
6. **Easy to remove:** simply break the paper pleat.
7. **Keeps pouring lip clean**—leaves no adhering substance when removed.
8. **Can be re-used** by consumer as effective cover until bottle is emptied.
9. **Durable seal** will not loosen under rough handling, truck vibration or other ordinary delivery conditions.
10. **Resists capillary attraction**—prevents moisture creeping under closure.
11. **Indelibly marked** to carry full information as to name, contents and date.
12. **Economical**—low cost mass production permits use on *all* grades.
13. **Practical Operation**—Sealon applying machine assures trouble-free operation at filling line speeds of large and small dairies.
14. **Sales Value**—eye appeal lends distinction to the bottle.

Some closures may give you *some* of these advantages. Sealright gives you all of them!



Sealright "SEALON" HOODS

THE SEALRIGHT COMPANY, INC., FULTON, N. Y. • KANSAS CITY, KANSAS
SEALRIGHT PACIFIC LTD., LOS ANGELES



Here is a typical Peerless performance record: A Peerless Deep Well Pump was installed January 29, 1939, in one of the "toughest" pumping locations in America. It was pulled June 2, 1944, to permit installation of another Peerless Pump of greater capacity. For almost 5½ years it was operated at an average of 10 hours daily, with a total of 20,714 hours of meritorious service. Never was a single cent spent on repairs. After pulling the pump, inspection revealed no appreciable wear. It has been installed in a near-by well and is expected to give years of additional service with little or no repair cost. This is the kind of service for which Peerless is noted—low cost of upkeep and unfailing dependability. Make Peerless your choice if economy is your objective.

PEERLESS PUMPS

TURBINE
HI-LIFT
HYDRO-FOIL

PEERLESS PUMP DIVISION
FOOD MACHINERY CORPORATION
301 West Avenue 26, Los Angeles 31, California
1250 Camden Avenue S.W., Canton 6, Ohio
Other Factories: San Jose 5, Fresno 16, California

and the Western Counties of the State, it is evident that the centrifugal attraction of other markets could not be resisted. It is equally possible to suggest, in view of the rapidity with which the New York market lost producers, that its pre-war milkshed was entirely too large for its needs. As the rate of departure is now at a comparatively reduced speed, it is evident that a centripetal force, representing an effective equilibrium in prices, is now holding producers in the New York pool.

The loss in producers, however, has not been a wholesale calamity. There is reason. It lies in the rising productivity of the dairy farmers who have remained in the pool. The dairy farmers of the New York milkshed possess an enviable production record in view of ever-present difficulties in obtaining labor, feed, and equipment. From 1940 to 1943, the average daily delivery per farm climbed from 224 to 250 pounds. It increased 12 per cent. The average number of producers in the same four years—1940 to 1943, inclusive—declined 12 per cent. The rise in productivity offset, in large part, the reduction in producers.

The increase in productivity occurred in all sections of the milkshed. Vermont farmers, however, can boast of the

High speed filling and capping prevent contamination

best record. The average 1943 delivery was 40 pounds heavier than in 1940. The increase in other sections varied between 22 pounds in Eastern New York and 29 pounds in the Northern and Northeastern counties of the State.

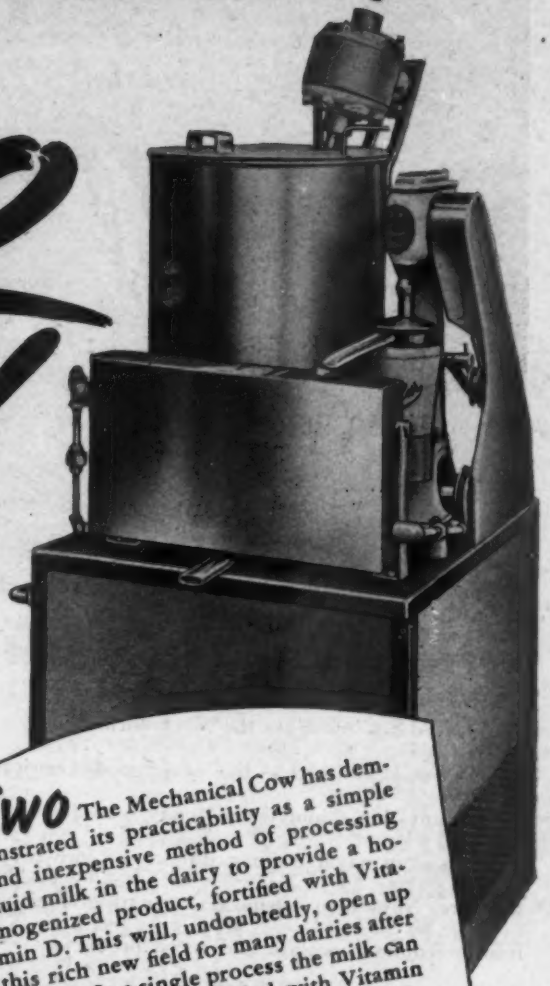
Seasonal Variation More Accentuated

Increased productivity, especially when stated in annual averages, could beguile us into complacent satisfaction. Unfortunately, the current production pattern is not so comforting, and the present trend points toward a new and acute problem. The output of our dairy farms is undoubtedly larger than it ever has been in our history. The trouble is that the rise in production has been accompanied by a shift to heavier flush production in the early summer. It is true that the average farm is producing more milk. The additional milk is apparently coming to market in the summer period. What is doubly troublesome is that some of the milk, formerly produced in the winter season, has been shifted to the flush months.

In other words, the seasonal variation in production has become more accentuated, more extreme. That shift in the seasonality of production is today the principal problem confronting the New York market and other sales areas of the Northeast. More milk in the flush and less milk in the short season creates an endless variety of difficulties.

Here are some examples of what has happened: Daily deliveries to pool plants in June averaged 150 pounds per farm higher than in November 1941. That average rise of 150 pounds represented a seasonal gain in production of 63 per cent. In the very next year, however, the June 1943 average daily delivery was 178 pounds over the November 1942

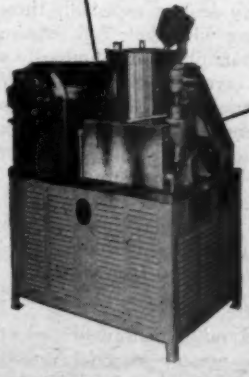
THE MECHANICAL COW DOES TWO THINGS WELL!



One The Mechanical Cow makes *real* milk, cream and ice cream mix, of any desired butter-fat content, at any time, in any place. These products are not synthetics or substitutes in any sense, but contain *all* the elements of the fresh products. In nutritive value, flavor and body they are equal in every respect to the natural products. In purity and uniformity they are superior.

The only ingredients used are skim milk powder, unsalted butter and water. These are mixed, pasteurized, emulsified, clarified, homogenized and cooled to produce products that are hard to distinguish from fresh milk or cream.

The Mechanical Cow is being used extensively to supply milk, cream and ice cream for our armed forces all over the world. Hundreds of highly successful installations have been made on Navy vessels and at Army, Navy and Marine bases.



This is the new Combination Mechanical Cow and Ice Cream Maker. This machine not only makes the ice cream mix but also has its own ice cream freezer. It is entirely self-contained, with built-in refrigerating and pasteurizing units.

Two The Mechanical Cow has demonstrated its practicability as a simple and inexpensive method of processing fluid milk in the dairy to provide a homogenized product, fortified with Vitamin D. This will, undoubtedly, open up this rich new field for many dairies after the war. In a single process the milk can be pasteurized, emulsified with Vitamin D, homogenized, clarified and cooled.

The Mechanical Cow also provides a method of making milk "to order"... with such food elements or vitamins added as are indicated for special diet requirements. This, too, will open up new markets for the enterprising dairy.

While the entire production of Mechanical Cows is now going to our armed forces, it is none too early for the forward-looking dairy to investigate the many opportunities for greater sales and profits which it will make possible.

For Complete Information Write to

UNITED DAIRY EQUIPMENT COMPANY

WEST CHESTER
PENNSYLVANIA

AFTER YOU, MATE!

Dad served his "hitch" in the Navy during World War I, and now — like other good Americans — he wants his shipmates of today served *first!* At sea and in naval training stations . . . wherever they are, Navy men depend on strength-giving, heart-warming chocolate and cocoa products. At home, Johnston is distributing all remaining supplies speedily and fairly.

WHEN THE "FLEET'S IN" TO STAY an *even tastier*, easier-to-handle Dairy Drink Powder will be offered you by Johnston—watch for it!

ROBERT A. JOHNSTON COMPANY
Chocolate and Cocoa Division
MILWAUKEE NEW YORK

Johnston
CANDIES AND CHOCOLATE

figure. The seasonal increase was 75 per cent. By June 1944, the average had risen to 207 pounds over November 1943 for a seasonal advance of 96 per cent.

Those figures, by the way, are milkshed averages. Up in Northern New York, as an extreme, the June 1944 average was 178 per cent of the daily delivery per farm in November 1943. Flush production in New Jersey, where the least variation exists, was 45 per cent over November 1943. Back in 1942, New Jersey's flush rate was only 15 per cent in excess of the previous November.

Surplus Handling Facilities Taxed

The increasingly heavy flush everywhere in the milkshed has thrown an ever larger burden on the facilities for handling surplus milk. Transportation, especially uncertain under wartime handicaps, is seriously strained. The capacity of manufacturing plants is, in itself, a limiting factor. Added to that in 1944 was an inadequate supply of plant labor. It is easy, therefore, to understand why the flush production is rapidly nearing the point of being physically unmanageable. The problem that is shaping up is, not of distressed milk in the sense of milk without buyer, but of distressed milk in the sense of milk without a truck to haul it or a plant to process it. There is no indication today but that the 1945 flush will reveal an even greater seasonal rise. If that takes place, there

Motorized retail delivery units insure economical distribution

is and can be no guarantee that our production will be used without waste and loss.

The impact of the wider seasonality in November reveals an equally troublesome condition. Here are foundation figures: The average milkshed farm delivered 63 per cent of its June production in November 1941. In November 1943, two years later, the average was 52 per cent of the previous June. Northern New York's November production, figured on the basis of the average farm, was only 36 per cent of June. In 1941, however, the November average was 47 per cent—very near, incidentally, to the milkshed average two years later. The transition to less milk in November is clearly evident.

In the lesser November production can be found the primary origin of the persistent threat of market shortage. It explains too the clamor of many dealers, especially those without country supplies in keeping with their full requirements, for an allocation program. Their plight is admittedly serious. Various public agencies have certain responsibilities in assuring a full supply to the fluid markets. The shift in seasonality has forced them to take additional steps. The New York City health department recently adopted the so-called 75-per cent rule. It is designed to compel plant operators to put 75 per cent of their intake at the disposal of the market in one form or another. While this type of regulation may alleviate a threatening shortage, especially one created by diversions to other markets, it does not correct the ever-widening spread between summer and winter production.

Current prospects, based on a continued reduction in producers combined with the greater seasonal variation, indicate that our November supply will range between 1 and 4 per cent less than in 1943. There is every reason to believe

that it will be increasingly difficult to assure every handler a full supply in November.

The continuing series of surplus-shortage crises is truly vexatious. But it is more than that. It is the paramount problem of the industry. It contains the seeds of even more serious post-war difficulties when the summer surplus will cease to be as desirable as it is now. In the meantime, a better adjustment of summer and winter production should be a primary goal of the industry.

Vast Post-War Equipment Market

Milk Industry Foundation Estimates Huge Peacetime Expenditures to Maintain Efficiency

Post-war expenditures of $360,000,000 by milk and dairy products companies will be necessary for new equipment and parts during the first two years of post-war operations, according to Milk Industry Foundation estimates. Dairy farm equipment is not included but it is estimated that $32,000,000 worth of milking machines alone will be needed in the same period.

Improved equipment will return in post-war period

Tremendous wartime demands for milk and dairy products have emphasized equipment needs. The nutritional value of milk for the fighting forces is widely recognized by military authorities; lend-lease has added to the demand and nutritional authorities class milk as a top wartime food.

The U. S. produced a peak of 56½ billion quarts of milk in 1942 when nearly ideal conditions prevailed. This was over 1 billion quarts greater than the previous high. In 1943, production totaled 56¼ billion quarts. While 1944 production may not exceed this, it continues at high levels.

Efficient Operation Essential

Industry operators are well aware of the value of maintaining efficient methods. The difference between profit and loss may depend materially upon keeping abreast of the times. Milk plant equipment means large investments on the part of the distributor. Efficient operation is a financial necessity in milk distribution, as farmer and labor today receive together around 80 per cent of the milk distributor's dollar.

Many industry leaders believe the demand for milk and manufactured dairy products should continue strong after the war. The consumption of milk by men in the armed forces and its sale by canteens is far beyond expectations, a demand that may carry over when the men return to civilian life.

The equipment in fluid milk plants has been given hard usage during the war. Despite rigid conservation measures, manpower losses and other wartime difficulties, new methods had to be devised to cope with expanding production and demand. Distributors have struggled along with existing equip-

UNITED STATES OF AMERICA
UNIVERSAL EXPOSITION SAINT LOUIS MDCCCCIV
THE INTERNATIONAL JURY OF AWARDS HAS CONFERRED A
GOLD MEDAL

In 1904

BUHL MILK CANS WERE AWARDED THE GOLD MEDAL AT LOUISIANA PURCHASE EXPOSITION . . .

● St. Louis, in 1904, was the center of world attention. The great Louisiana Purchase Exposition opened to throngs of visitors from all over the world. Among the thousands of exhibits, Buhl Milk Cans demonstrated the latest improvements in modern milk containers. Judges awarded this fine product the Gold Medal, thus adding another honor to the Buhl tradition.

Three Victory Models are available today. When peace comes a complete line of Milk Cans, Pails, Strainers, Ice Cream Cans, etc., will again be available.

QUALITY BUHL SINCE 1888

THE HUMBLE MILK CAN THAT BUILT A GREAT INDUSTRY

BUHL MANUFACTURING CO. • DETROIT, MICH.

MANY a milk plant operator secretly worries about his hard-to-get fittings. Every day as he "sets them up," he gives each one an extra little twist that means a little more wear. He's all prepared to see any of them leak, most any time. If he had to, he too would be willing to "drill deep," just to find a really worry-proof milk joint closure.

With ***Seal-Leaks*** working for you, you needn't worry about your sanitary fittings. Exact to size, shape and thickness. One for every milk line, heater and cooler closure in your entire plant. Cut by the million from the now famous, tough, resilient Beaverite stock. You've tried the rest. Now treat yourself to the best — and ***quit worrying!***

Yes, your own jobber stocks the regular sizes. Include them in your next order to him. Our special new unit-container keeps unused gaskets dust-free. So stock up safely, and avoid running short. Ask your Jobber for SEAL-LEAKS by name.

BEAVERITE PRODUCTS, INC.
Beaver Falls **New York, U. S. A.**

5

Seal-Leaks
The Universal Name in Gaskets

ment under hardships and shortage of labor, not requesting priorities on machinery for patriotic reasons.

During the first post-war years the various branches of the dairy industry will spend up to $125,000,000 annually for processing equipment and parts alone. New vehicles will cost around $50,000,000 annually.

Pre-war homogenized milk sales increased in certain sections but no homogenizers have been released during the war. Sales of these machines might reach $3,000,000 annually.

Increase in Pasteurization

Pasteurizing equipment will be in demand as communities requiring milk to be pasteurized are increasing. Today, 85 per cent of the fluid milk supply in U. S. cities of over 10,000 population is pasteurized.

A recent government study declared that 438 new milk pasteurization plants costing $8,123,500 are needed in 34 states and Alaska. The yearly economic loss from milk-borne disease outbreaks chiefly due to raw milk is at least $3,000,000. Less than 25 per cent of the milk is pasteurized in communities under 2,500.

In 1937 approximately 30 million bottles of milk were delivered daily to American doorsteps. This is over 10 billion bottles per year. Today, it is probably 50 per cent more, or 15 billion bottles per year. This means greatly increased expenditures for bottle caps and crates.

Equipment used in all branches of the industry such as weigh cans, receiving tanks, pumps, separators, coolers and can washers will exceed normal purchases. War has made it necessary to operate machines at higher speed and under conditions that wear our machines faster.

Dry Milk Conversion

Conversion of about 20 plants in the Wisconsin area from the manufacture of non-fat dry milk solids to the production of dehydrated whole milk to meet increased military demands was discussed at a recent meeting of the Dairy Equipment and Machinery Manufacturers Industry Advisory Committee, the War Production Board reports.

Committee members pledged their efforts to manufacture additional machinery and equipment to enable the plants to change to the production of dehydrated whole milk. WPB officials promised help in procuring components and general processing equipment. This would be done by the issuance of directives, if necessary, the officials said.

The War Food Administration is making a survey of the Wisconsin area plants to determine whether conversion is practicable in each plant, and whether it can be done quickly so that increased production of dehydrated whole milk can start within three months.

W. T. Cannon, Jr. Named

Washington, D. C.—Appointment of William T. Cannon, Jr., of Salt Lake City, Utah, as acting head of the Fluid milk Section, Food Price Division of the Office of Price Administration, was announced September 26 by Jean Carroll, division director. Mr. Cannon succeeds Patrick E. O'Donnell, who recently resigned because of poor health.

Other members of the Fluid Milk Section working with Mr. Cannon are: Russell J. Davis, of Harrison, N. Y., price analyst; Howard D. Davis, of Pennsylvania, business specialist; Ann A. Schlenker, of Boston, Mass., economist for the section, and Sarah Murphy, of Cumberland, Md., junior price analyst.

Dairy Manufactures Conference

March, 1945 Event at University of Illinois to Highlight Future Planning for the Industry

Urbana, Ill.—The Department of Dairy Husbandry of the University of Illinois will hold a Conference here on Future Planning for the Dairy Industry on March 14 and 15, 1945. In announcing the event, Prof. P. H. Tracy, head of the Department, states that several speakers of national reputation have been invited to assist with the program. The subjects to be discussed are as follows:

How can we best maintain purchasing power in the post-war period?

Plans for improving farm tenure in the midwest.

Potential development of the dairy industry in the southern states.

Dairying in Central and South America.

A milk quality program for the post-war period.

Advances in the fields of science that may directly or indirectly affect the dairy industry of the future.

The part that nutrition studies are likely to play in the future expansion of the dairy industry.

Expanding markets and developing new jobs in the dairy industry.

Symposium—How can we make plant operations more efficient? Market Milk, Ice Cream, Butter, Cheese, Evaporated Milk.

Symposium—Technical advances being made in the development of new types of dairy products. Frozen Milk, Butter Oil, Powdered Mix, Powdered Milk, Substitute products.

It is suggested that all who plan to be present for this meeting make their hotel reservations as early as possible. A complete program will be mailed upon request. Address inquiries to Prof. P. H. Tracy, Department of Dairy Husbandry, University of Illinois, Urbana, Ill.

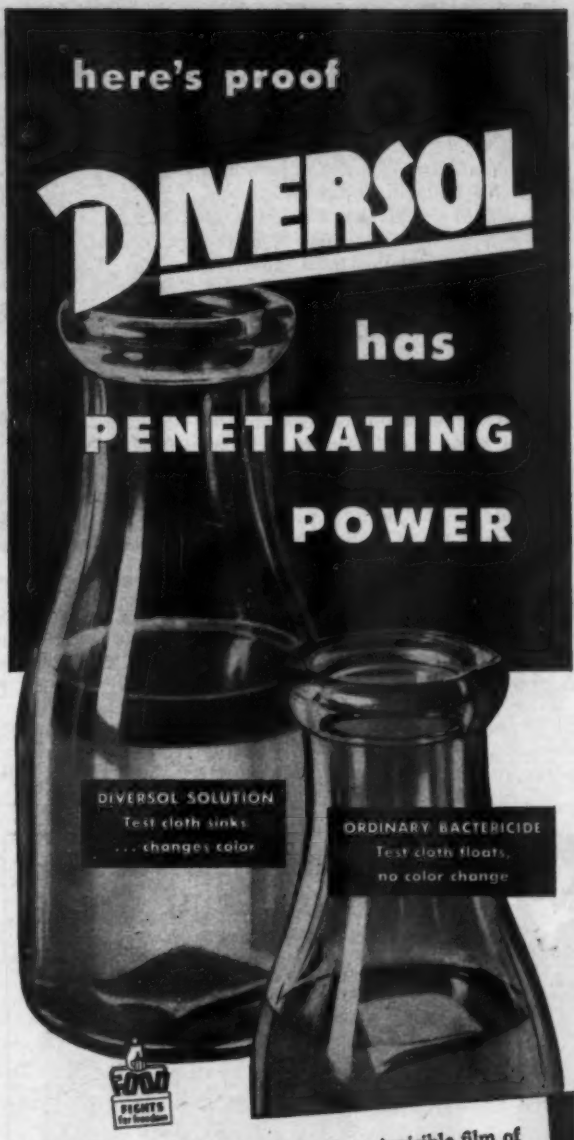
Adopt Square Milk Bottles

The Columbus (Ohio) Milk Distributors Association at a recent meeting voted to inaugurate the use of the new square milk bottle on or about December 1, 1944. According to the association's secretary, Professor R. B. Stoltz, Department of Dairy Technology, OSU, "This move was necessary to hold and extend economies in milk distribution, and would also serve as a convenience to the customer."

Canton milk dealers have sent a committee to plants now using the square bottle and are seriously contemplating the change to the new type bottle in that area. It is reported also that certain individual milk dealers in Cleveland have also contracted for the square bottle.

Sorry, But It's No Deal

Indianapolis, Ind. (E.B.)—E. L. Murray, a route salesman for the Ballard Creamery here relates a painful experience incident to the milk shortage. While he was delivering milk in a fashionable district of the city he was stopped by a passing motorist. The man got out of his car and hopefully asked for a half pint of cream. Murray politely informed him that he had none to spare. The dejected motorist paused a moment and then pleaded: "I'll give you a half pint of whisky for a half-pint of cream." Regretfully, Mr. Murray replied that not even for a whole pint of whisky could he spare a half-pint of cream.



Milk-spoiling bacteria lurk beneath an invisible film of grease that often remains on equipment after cleaning. A dependable bactericide, therefore, must have *penetrating power . . . does yours?* Here's a simple way to find out.

Just send for a Diversol penetrating power *test cloth.* This special cloth has been impregnated with a dye and then coated with an invisible film of fatty matter. The indicator changes color only when available chlorine penetrates the fatty film.

When a piece of this cloth is placed in a Diversol solution, it quickly sinks and changes color . . . proof that Diversol has penetrated the fatty coating and made contact with the dye. In a bactericide that is lacking in penetrating power, the cloth simply floats on top of the solution and remains unchanged in color.

Diversol not only has unusual penetrating power, but is quick-acting and non-corrosive. Comes in stable crystals that *seal-in* the available chlorine until dissolved in water. With Diversol it is a simple matter to prepare solutions of a definite, germicidal strength. Just add to the water . . . then rinse or spray the previously cleaned equipment. The Diversey Corporation, 53 West Jackson Blvd., Chicago 4, Ill.

Mono Service Sold

Continental Can Company Purchases Prominent Paper Container Firm— Executive Personnel Retained

Continental Can Company, Inc., has acquired for cash all of the assets and business of Mono Service Company of Newark, New Jersey, pioneers in the manufacture of paper hot drink cups and paper food containers, according to Elmer Z. Taylor, president and founder of Mono Service Company. Mono will now be known as Mono Containers, Division of Continental Can Company, Inc.

Mr. Taylor, inventor and designer of all special Mono machinery, and responsible for the world-wide production and sale of Mono products, said the business will operate in the future as a division of Continental Can Company under the Mono trade name, with the same managent and personnel ond with the same policies of high quality and efficient, friendly service which has characterized Mono during its thirty-four years of operation.

Through the purchase of Mono Service Company, Continental Can Company also became the owner of a substantial holding in Mono, Ltd., of Toronto, Canada., and of royalty and other reights in the Mono companies in London, England; Berne, Switzerland, and Capetown, South Africa. Through Mr. Taylor and previous close business cooperation,

Elmer Z. Taylor

they enjoy the goodwill and continued contact with Mono companies in Auckland, New Zealand; Sydney, Australia; Dublin, Ireland; Roubaix, France, and Turin, Italy, with potential contacts and actities in other countries.

Mr. Taylor said, "I look forward to the continued business friendships, which in many cases were established over a quarter of a century ago, and I anticipate an era of great activity and expansion for Mono throughout the world, backed by the resources and reaserch of Continental Can Cospany."

ROBOT'S RESULT

A recent Associated Press dispatch from Folkestone, England carries the report that by solemn decision of an English court, robot bombs are deemed to have power to "frighten" butterfat from milk.

Philip Driver, a dairyman, was tried on a charge of selling milk deficient in fat. He testified and proved that the milk was just as it came from the cows, and witnesses for the prosecution and defense alike acknowledged that the cows' appetites had been poor after three flying robots had struck within half a mile of their barns. Driver was acquitted.

NEW DAIRY FIRM

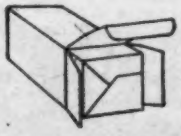
Newark, N. J.—White House Dairies Co. of Neptune Township; has been incorporated for $50,000. Michael A. Shelton is the agent.

Drip! Drip! **KEEP your PROFITS**
by installing DOERING BUTTER PRINTERS

Doering machines produce butter prints of superior mold at unbelievably low cost . . . always uniform in shape, weight and moisture content. Sizes and speeds for all sized operations.

Write for Catalog

C. DOERING & SON, Inc., 1379 W. Lake St., CHICAGO 7



You'll like AUTOMAT'S END-LOCK WRAP BECAUSE it's there to stay!

AUTOMAT machines are built of stainless metals that make sanitation easy—are impervious to lactic acids and brines. Handle quarters, halves or pound solids at speeds up to 7,500 pieces per hour.

Write for Catalog, or free package survey service.

AUTOMAT PACKAGING MACHINE WORKS, Inc.
15 Broadway, TOLEDO 4, OHIO

MILK CAN SPECIALISTS
for 79 YEARS

Leadership and progress go hand-in-hand. That's why we constantly seek and search for ways to improve our products and our service.

SOLAR STURGES MFG. CO.
Melrose Park, Illinois

Easy Does It

Additional Advantages of Square Milk Bottle for Processors ond Consumers Effectively Demonstrated

To illustrate the ease and convenience with which milk may be poured from the square bottle the Liberty Glass Company of Sapulpa, Oklahoma, has released the above photo of a handsome miss in the act of pouring milk from their lately developed "Econotainer."

A letter accompanying the photo states, 'To feature something different, this picture shows the easy pouring feature of

the square bottle. The bottle is more easily handled; its smaller diameter and square sides make it easier to hold; and it pours like a pitcher."

Commenting further upon square milk bottles the Liberty Glass Company states, "Although the 'Econotainer' is lighter, shorter and radically different from the glass containers now in general use, tests have shown that the new container can be readily used with minor changes in plant equipment.

"Milk dealers, it has been shown, benefit by savings in plant operation, freight expense, space in stock rooms, cool rooms and trucks; smaller, lighter cases; easier handling and reduced breakage.

"Retail dealers have welcomed the 'Econotainers' because they require up to 66 per cent less space in shelves or refrigerators. Twenty 'Econotainers' fit into the space required by twelve standard bottles; and the distinctively different bottle attracts much attention from customers, according to retailers."

HEIL "Trailerized" MILK TANKS

1 Compare the savings in time and cost, and the convenience in handling and cleaning one 2500 gallon Heil Tank and 250 ten-gallon cans.

2 When using 10-gal. cans, there is more than 400% more metal in contact with the milk which means 4 times as much heat transfer. Heil "Trailerized" Tanks with 2½" thick insulation keep milk temperatures down where they belong.

3 A trailer carrying 250 empty 10-gal. cans weighs twice as much as a Heil "Trailerized" Tank—an excess dead weight of almost 3½ tons.

4 Authentic field tests prove that ½-pint of milk adheres to each 10-gal. can when unloading. You waste one gallon of milk for each 64 cans.

5 Heil engineers have designed and built these tanks to give you dependable 24-hour service. They stay "on-the-job" without those minor troubles that add up to major losses in time and in undelivered gallons of perishable products that "must get through."

6 The Heil Co. built the first stainless steel milk transport tank (1927) and has been building two out of every three milk tanks (more than all other manufacturers combined) ever since.

7 When you invest in a milk transport tank made of lifetime stainless steel costing $1000 a ton it is just good business to choose a fabricator with the years of experience and "know how" to make that investment pay off.

T-115

keep milk temperatures down for SAFE transportation

A 2500 gallon milk tank, for example, has 360 sq. ft. of surface to contact with the milk . . . 250 ten-gallon cans represent an area of approximately 1500 sq. ft. of surface in contact with the same volume of milk. With a Heil Milk Tank, there is far less heat-transferring surface and temperatures can be more readily kept lower for safe transportation.

A quick glance at the feature points listed here tells you why you save time, money and manpower when you use a famous Heil "Trailerized" (frameless) Tank. Save your milk, add to your profits by specifying a "Heil" Tank on your government applications, for milk-hauling equipment to serve your plant.

Write for bulletins

Government Program

makes these Heil "Trailerized" Tanks available:

MILK

Standard single axle:
2500, 2873, and 3400 gallons.
Other sizes also available.

ARMY E NAVY

THE HEIL CO.

GENERAL OFFICES • MILWAUKEE 1, WISCONSIN

Chester E. Gray Dead

Well Known Dairy Industry Leader Passes Suddenly Following Heart Attack in California

The dairy industry has lost one of its greatest, most respected and widely admired leaders. On the evening of September 19 at his home in Oakland, California, C. E. Gray, Chairman of the Board, American Dry Milk Institute, Inc., died suddenly of a heart attack. Returning that morning from Chicago, where he had paused momentarily on his way home from dairy meetings in Washington the previous week; he appeared to be in normal health.

Chester Earl Gray was born May 16, 1881, on the Gray Homestead, Evergreen Farm, Columbus Junction, Iowa. That farm was established in 1840 and on July 27, 1940, a Centennial celebration took place commemorating the hundredth anniversary of its founding and retention in the family possession. Mr. Gray's mother and a sister, Mrs. Pierce, who are among his survivors, still live on Evergreen Farm. On April 25, 1904, Mr. Gray was married. Mrs. Gray and two married daughters survive him in California.

Graduating from Iowa State College in 1901 he became an assistant at the college, where he remained for about two years. He later received the degree of Master of Science from the same institution. In 1902 he became chemist for the Continental Creamery Co., Topeka, Kansas, where he remained for two years. In 1904-5 he was employed by the Beatrice Creamery. From 1905-8 he was chemist in charge of the research laboratory of the Dairy Division of the Bureau of Animal Industry, U. S. Department of Agriculture, Washington, D. C. In this capacity he was sent to Humboldt County, California, to study the problem of butter turning white very rapidly.

Joins Golden State Company

In 1908 he became assistant general manager of Central Creamery Co., Eureka, California, which later became a part of Golden State Co., Ltd. In 1915 he was made general manager of California Central Creameries, now a part of Golden State Co., Ltd. Also in 1915 he was elected president of Golden State Co., Ltd., a position he held until 1931 when he was made president and chairman of the board. Relinquishing the office of president in 1933 he continued as board chairman until 1937. Up to the time of his death he was associated with the company largely in connection with technical and research matters.

In 1925 Mr. Gray was one of the organizers of the American Dry Milk Institute, Inc., and became its first and only chairman of the board. In 1943 the C. E. Gray Award was established by the Institute, in his honor, to recognize outstanding achievement in the dry milk industry.

Mr. Gray was an inventor and patentee of processes and apparatus for drying and for manufacturing products from milk and cream. He was past president of California Dairy Council, a director of the Pacific Slope Dairy Association, a former member of the California State Board of Agriculture and a member of the committee advisory to the directors of the Giannini Foundation of Agricultural Economics, University of California. In 1928 he went to Germany on a U. S. Department of Agriculture mission to advise there on dairy industry problems.

Funeral services were held September 23, in Tower Chapel, Mountain View Cemetery, Oakland, California.

PASTEURIZING PLANT OPENS

Sedan, Kans.—The Prentice Pasteurizing plant is now open for business.

It happened in Los Angeles in 8 months

from 4,000 to 80,000 jars a month!

Interested?

Write for franchise-details in your territory...and the profit possibilities on this cultured milk-food.

Address: **YAMI YOGURT PRODUCTS COMPANY**
DEPT. AM, 147 NO. LA CIENEGA BLVD., BEVERLY HILLS, CALIF.

DIFCO

Detection of Coli in Milk

Bacto-Violet Red Bile Agar

This medium is recommended for direct plate counts of the coliform bacteria in milk and other dairy products. Use of this medium for plating purposes is approved in "Standard Methods for the Examination of Dairy Products."

Bacto-Brilliant Green Bile 2%
Bacto-Formate Ricinoleate Broth

These liquid media are recommended for the detection of coliform bacteria in milk. Both media conform in every way to the formulae specified in "Standard Methods."

DIFCO LABORATORIES
INCORPORATED
DETROIT, MICHIGAN

DROP COTTAGE CHEESE QUOTAS

Washington, D. C.—War Food Administration has announced elimination, effective October 1st of quotas limiting sale of cottage, pot and baker's cheese to 100 per cent of the quantity sold in June, 1943. WFA pointed out that although whole milk and whole milk products generally continued in tight supply, an excessive quantity of hot roller process dry skimmilk is available in many areas. They expect removal of restrictions on sales of cottage cheese to help attract some of the surplus roller dry skimmilk. How much action, taken under Amendment 5 to WFO 79, will act in this direction is obscure.

CHRISTIAN WIELAND DEAD

Christian Wieland, 68, who with his five brothers and sister founded the Wieland Dairy Company in 1888, died early this month in his home in Chicago.

Mr. Wieland, who was a vice-president of the company, retired 14 years ago when the firm was merged with the Borden Dairy Company.

He is survived by his widow, Ada; a son, Lt. Robert A. of the army; a daughter, Mrs. Vivian Gonseth; three brothers and a sister.

Liberty Glass Sales Representatives

Liberty Glass Company is particularly fortunate in having the veteran sales staff shown above. Their long years of experience well qualify them to help solve the current and post-war packaging problems of America's milk plants and beverage bottlers.

Though products, business conditions and selling methods change constantly, the men who represent this pioneer glass manufacturer at Sapulpa, Oklahoma, have been familiar faces in the offices and plants of the nation's milk and beverage industries.

Reading from left to right (top row), James B. Starnes, sales manager, has been with Liberty 18 years; Wiley M. Tye, sales supervisor, 14 years; Worell Dees, assistant sales manager, 9 years; and E. V. "Van" VanVelzer, Kansas City, Mo., 17 years.

Left to right (second row), E. D. Fant, Memphis, Tenn.; W. W. "Alex" Alexander, Dallas, Texas; Sam Newby, Omaha, Neb.; H. T. Miles, Denver, Colo.; and Joe P. Bain, Houston, Tex. While they are new members of the Liberty organization, Newby was with The Thatcher Manufacturing Company for 13 years; Miles was with Creamery Package Manufacturing Co. for 15 years; and Bain, former sales manager of National Manufacturing Co. of Kansas City, was with that firm for 13 years.

Craft-
integrity
25 YEARS SUCCESSFU MANU TURING EXPERIENCE
For more than 25 years Superior craftsmen have produced quality dairyware. Through long experience Superior men have come to look upon their work in the traditional craft spirit . . . a spirit that develops sound engineering, careful material selection, honest craftsmanship and efficient production . . . a spirit that yields greater returns in savings and satisfaction for the purchaser of Superior dairyware than expedient or compromise ever can.
SUPERIOR METAL PRODUCTS COMPANY
509 FRONT AVENUE SAINT PAUL MINNESOTA

FINE CONSUMER REACTION

Survey in Cedar Rapids Indicates Square Bottle Acceptance

After the "Handi-Square" milk bottle had been in use for several weeks in the Sanitary Farm Dairies in Cedar Rapids, a scientifically conducted consumer survey among 500 typical Cedar Rapids housewives was made by an outside organization.

Reported results of the survey showed that: 93 per cent liked the "Handi-Square"; 90 per cent gave specific reasons for their preference; leading reasons being space saving, 61 per cent, and convenience, 24 per cent; 86 per cent said the "Handi-Square" is as easy or easier to handle; 92 per cent said the "Handi-Square" is as easy or easier to pour from; 92 per cent said the bottle is as easy or easier to clean; 91 per cent said the bottle fits better in the family refrigerator; 12 per cent said that since they can store more milk in the refrigerator, they buy more milk; 66 per cent would buy from a dairy using "Handi-Squares," all other factors being equal.

Many of the housewives interviewed gave interesting and enthusiastic comments. Some said the bottle "is nicer looking". Others said, "It doesn't slip," "It stacks better," "Can lay down in the refrigerator," and a few said the bottle "seems lighter".

Bottle Collars Promote Square Bottles

PLANS SHORT COURSE

Oklahoma A. & M. College to Hold Three-day Session in November

Stillwater, Okla.—H. C. Olsen, Professor of Dairy Manufacturing, Oklahoma A. & M. College, has announced that the Department of Dairying will offer a five-day Short Course in Dairy Manufacturing November 13 to 17, 1944, inclusive.

"November 13 and 14 will be devoted to cheese making problems," says Prof. Olsen, "with H. L. Wilson, Dairy and Poultry Branch, War Food Administration, Washington, D. C., giving demonstrations in a local cheese plant on improved methods in Cheddar cheese manufacture. These demonstrations by a cheese specialist like Mr. Wilson should be attractive to all the cheesemakers in this area.

"November 15, 16 and 17 will be devoted to discussions and demonstrations on problems in butter, ice cream, market milk, and quality control," Prof. Olsen points out.

Statistical Review of the New York Market for September, 1944

CONCENTRATED MILKS

DATE	CASE CONDENSED Known br. (case)	CASE CONDENSED Other br. (case)	CASE EVAPORATED Known br. (case)	CASE EVAPORATED Other br. (case)	Unsw.cond. whole milk 40-qt. can 10% Fat	DRY SKIMMILK —Spray— Known br. Lb.	DRY SKIMMILK —Spray— Other br. Lb.	DRY SKIMMILK —Hot Roller— Other br. Human	DRY SKIMMILK —Hot Roller— Other br. Feed
Sept. 1	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 4	Holiday								
" 5	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 6	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 7	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 8	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 11	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 12	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 13	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 14	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 15	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 18	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15½@—	15½@—	—@—
" 19	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15 @15½	—@—	—@—
" 20	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	15 @15½	—@—	—@—
" 21	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	14 @14½	—@—	—@—
" 22	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	14 @14½	—@—	—@—
" 25	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	14 @14½	—@—	—@—
" 26	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	—@15½	13 @14½	—@—
" 27	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	—@15½	13 @14½	—@—
" 28	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	—@15½	13 @14½	—@—
" 29	6.25@6.40	—@—	4.20@4.25	4.20@4.25	—@—	15½@—	—@15½	13 @14½	—@—
T. & A.	6.32½	—@—	4.22½	4.22½	—@—	15½	15½	14.333	—@—

N. Y. MILK PRICES

Basic prices for 3.5% milk in 201-210 mile zone in effect in New York City Area under the Federal-State Marketing Agreement used by all handlers in figuring returns for Sept.:

Class	Price per cwt.	Per point butterfat differential
I In Marketing Area	$3.70	.04
II Outside non-Federal	.20†	.04
II-A	2.70	.077
II-B	2.58	.074
II-C	2.32	.066
II-D	2.364	.068
II-E	2.22	.063
II-F	2.22	.063
III	2.728	.078
IV-A	1.796	.051
IV-B	2.295	.056
V-A	1.260	.....
V-B	.686	.....

†Plus uniform price for September, 1944.

Rail & Truck Receipts at N.Y.C.&Metrop. Area
(Statistics of U. S. Dept. of Agriculture)

1943-44 Milk	Fresh Cream	Frozen Cream	Fresh Cond.Milk
Aug.	3,730,212	76,998	2,949	34,287
July	3,666,682	97,780	2,984	45,469
June	3,690,287	92,593	7,077	41,139
May	3,705,998	88,392	5,490	39,065
Apr.	3,440,073	70,274	2,730	35,946

E-Mac
BRUSHES
Devoted Solely to Serving the Strict Requirements of the Dairy Industry
Used from Coast to Coast
E-Mac DAIRY BRUSH CO.
READING - PA.

DRY MILK
For
ICE CREAM MANUFACTURERS
Spray or Roller Process
BUTTERMILK POWDER
WHOLE MILK POWDER
For Human Consumption
Cars or Less
Marwyn Dairy Products Corp.
141 W. JACKSON BLVD. CHICAGO
Phone: Harrison 8688

The short course speakers will include several specialists in addition to the regular staff at the Oklahoma A. & M. College.

FIRE DAMAGES DAIRY

Leicester, Mass. — Rossley's Dairy, Grove St., was severely damaged recently when fire swept through the building.

The blaze was first noticed in the boiler room and although the morning deliveries of milk had gone out there was still a large quantity of milk being pasteurized and bottled.

RATES: "Position Wanted," 50c. Limit of 50 words; 2c for each additional word. All other advertisements, 5c a word ($1.00 minimum). Keyed ads, 15c extra to cover return postage. The name and address should be included in counting the words.

All payments strictly in advance.

POSITION WANTED

Manager with thirty years practical experience and technical training in the dairy industry, wishes a permanent position with a dairy product manufacturing concern desiring the services of a qualified supervisor. Excellent references. Write Box 743, care this publication. 10-M-2

HELP WANTED

WANTED—Night foreman to take complete charge of New York City pasteurizing and bottling milk plant. State experience and salary desired. Reply to Box 745, care this publication. 10-M-t.f.

WANTED TO BUY

American Can Pint Containers — any printing—any quantity. Write Box 742, care this publication. 10-M

BUSINESS OPPORTUNITIES

FOR SALE—Retail-Wholesale milk and ice cream business located best section. South. Over three thousand quarts of milk daily; over one hundred wholesale ice cream customers. Make 500,000 lbs. butter yearly. Two distributing branches. Good price and terms. Large New York City approved manufacturing plant, also medium size approved creamery. Also Middle West Butter Factories for sale. S. Edelmann, 321 Broadway, New York 7, N. Y. 10-M

SITUATION WANTED

Are you looking for direct representation in the Chicago area, for condensed and powdered milks, also new products. I have the experience in these lines with the trade. Write Box 748, care this publication. 10-M

CURD WANTED

PART SKIM CURD wanted, around 1 per cent B.f.—for the Italian trade, also fresh whey cheese. Write Box 747, care this publication. 10-M-t.f.

AUCTION SALE
NAMONOCK DAIRY FARM
On Delaware River

at Hainesville, N. J.

12 Miles from Port Jervis

65 Miles from New York City

Well stocked and equipped — excellent farm land. One hundred and ninety acres including Namonock Island in the river. Containing bungalow and 2 houses, 2 barns, silos, etc.

Purchaser of real estate will have 10-day option to purchase all or any part of equipment and live stock, which consists of 57 head of registered Ayrshire and Holstein cows and 3 bulls, 25 shotes, farm equipment and feed as per price list available upon request at the office of Auctioneer. Representative on premises at Namonock. Sale on the property

Saturday, October 14th

2:30 P.M. Rain or Shine

Send or Call for Descriptive Booklet

Fred Berger & Co., Auctioneer

200 West 34th St. New York 1, N. Y.

Telephone: LAckawanna 4-4072

10-M

BUSINESS WANTED

Milk business with creamery and routes or will consider dairy farm with milk routes. Eastern states preferred. Will pay up to $25,000. Write Box 751, care this publication. 10-M

CHEESE PLANT WANTED

CAN MAKE DEAL with plant having a cheese production quota according to War Food Administration Cheese Limitation Order. Interested in manufacture soft type cream cheese. Write Box 746, care this publication. 10-M

CHOCOLATE FOR SALE

SWEETENED Chocolate Milk Syrup for Chocolate Milk drink. Best selling Chocolate today. Non-Settling. The C. I. Products Co., 222 East Second St., Cincinnati 2, Ohio. 10-M

FOR SALE

We are looking for new customers for our delicious Cottage Cheese. Available in bulk or in half-pound containers. If you want a good steady supply write to Box 752, care this publication. 10-M-B

CHEESE FACTORY FOR SALE

CHEESE FACTORY—good quota, upper New York State. Fully equipped—28,000 lbs. in flush. Good profitable operation. Washed curd. Low milk cost. Wonderful opportunity. Write Box 749, care this publication. 10-M

EQUIPMENT FOR SALE

FOR SALE—200-gallon round Pfaudler glass-lined truck tank; 7-in. single cylinder Worthington compressor; 6½x6½ York; 5x5 Sterling compressors all complete with accessories and motors; No. 60 and 72 motor driven, complete with motors, De Laval cream separators; Pfaudler King milk bottle filler, stainless steel, practically new; No. 2 cappers 48 bottles per minute; 600-gallon Pfaudler glass-lined vertical milk storage tank. Direct expansion surface cooler, 12 foot long, 8 two-inch tubes each section—two direct expansion white metal—one section tinned copper, distributor pipe, lower trough, various sizes surface coolers. Three 8,500 lbs. Tinned Steel Cheese Vats—wood frames, new liners, never used since rebuilt. Hydraulic hoist, water operated, better than ton capacity; Rice Adams rotary can washer 2-3 minute; 1,000-pound hanging Toledo

Knowledge of Dry Skimmilk Prices Now is Important in Operating Under the Federal-State Milk Marketing Orders For the New York Area.

Market Quotations and Comments on FLUID CREAM, DRY SKIMMILK AND OTHER CONCENTRATED MILKS are available regularly each week in the TUESDAY edition of our daily

Producers' Price-Current

SUBSCRIPTION EDITION

Subscription Price This Issue Weekly $3.00 Per Year

URNER-BARRY COMPANY

172 CHAMBERS STREET NEW YORK, 7, N. Y.

Upon Receipt of Check You Will Be placed immediately on Mailing List

OHIO
MILK CAPS
are
TRIPLE WAXED
HI-QUALITY—DEPENDABLE
Write us for samples
OHIO BOTTLE CAP CO.
PIQUA • • OHIO

Index of Advertisers

A

American Dairy Association..... 305
Ames Iron Works..... 318

B

Beaverite Products, Inc..... 324
Buffalo Foundry & Machine Company 299
Buhl Manufacturing Company... 323

C

Cherry Burrell Corporation, No. 5 Cover
Chocolate Products Company, No. 3 Cover
Cleaver-Brooks Company 312
Creamery Package Mfg. Company .....No. 8 Cover

D

Damrow Bros. Company..... 303
De Laval Separator Company, The .....No. 2 Cover
Difco Laboratories, Inc..... 328
Diversey Corporation, The..... 325
Doering & Son, Inc., C..... 326

E

E-Mac Dairy Brush Company.. 330

F

Food Machinery Corporation (Peerless Pump Division).... 320

G

General Mills, Inc..... 297
Girton Mfg. Company..... 311

H

Heil Company, The..... 327

J

Johnston Company, Robert A..... 322

K

Kaestner Company, The E. A... 314
Krim-Ko 307
Kurly Kate Corporation..... 308

L

Liberty Glass Company, The No. 4 Cover
Marwyn Dairy Products Corporation 330
Mathiesen Alkali Works (Inc.)..313
Mono Service Company..... 315
Mutual Products Co.....No. 7 Cover

O

Oakes & Burger Company, Inc... 309
Ohio Bottle Cap Company..... 331

P

Paterson Parchment Paper Company 317
Peerless Pump Division (Food Machinery Corporation) 320

R

Rex Company 302
Rogers Company, C. E..... 306

S

Sealright Company, Inc., The.... 319
Solar Sturges Mfg. Company.... 326
Solvay Sales Corp.....No. 6 Cover
Sorensen Company, The..... 332
Steelcote Mfg. Company..... 316
Superior Metal Products Company 329

U

United Dairy Equipment Company 321

W

Wilson Cabinet Company..... 304
Wright Company, Inc., R. G.... 301

Y

Yami Yogurt Prod. Company.... 328

EQUIPMENT FOR SALE

dial scale; 300-gallon Pfaudler glass-lined pasteurizer, complete; 24-in. by 10-ft. high pressure ammonia receiver; 20 horsepower Leffel Scotch Marine boiler and stack; 100-gallon viscolizer with motor, bronze head, hand capper No. 2 caps; new Binks spray cooling tower, 90 gallons per minute; used Bink spray cooling tower, 100 gallons per minute; 5,000 gallon vertical Pfaudler glass-lined storage tanks man-hole top—not insulated; Meyer-Dumore bottle washers, 8 and 12 wide come-back type, factory rebuilt; 50 horsepower upright boiler; 12 tube 8 ft. 1 in. I. T. cooler; 250-gallon Manton-Gaulin homogenizer, bronze head with motor; 8 wide Heil bottle washer, come-back type; one 90. either 48 mm. or No. 2 caps, one A.A. No. 2 caps and one Model C Mojonnier two type L Milwaukee milk bottle fillers; York heat exchanger, stainless steel plates; Permutit water softener outfit complete; Van Gunten milk filters, white metal, 12,000 lbs. per hour; Fort Wayne round stainless steel pasteurizer, 300 gallon, motor driven without motor; 100 gallon round Pfaudler glass-lined pasteurizer complete. Three sections tinned copper surface cooler, eight 1½ inch tubes; 10-ton ice field complete practically new, 1,200-lb. Vane churn complete with motor; Centrifugal water pump, with 7½-h.p. motor, 200 gallons per minute; Worthington centrifugal high pressure water pump with 10-h.p. motor, 100 gallons per minute; steam driven Worthington double acting water pumps 3½x2½-4 in. surface coolers, all sizes. 4 Cherry-Burrell 150 gallon stainless steel pasteurizers—3 stainless steel Cherry-Burrell ice cream mix pasteurizers; U. S. brine ice cream freezer, 80 quarts; 2 Illinois stainless steel all purpose pasteurizers with internal cooler agitators; 3,000 gallon glass-lined Pfaudler vertical storage tanks; 3 Damrow overhead automatic cheese agitators; Westphalia 8,500 lb. stainless steel no-foam separator; Mojonnier overrun tester. Sam Edelmann, 321 Broadway, New York 7, N. Y. WOrth 2-4975. 10-M

FOR SALE — One ¾ h.p. 36 inch Owatonna King Ventilating Fan. In good condition. Farmers Union Co-operative Oil Co., Augusta, Wis. 10-M

THREE 8,500 lb. vats, new liners, still in crates. One 1,200 lb. butter churn in good condition. Bargain. Box 750, care this publication. 10-M

EQUIPMENT FOR SALE

FOR SALE—150 and 250 gallon Stainless Steel Pasteurizers; 200 gallon Cherry-Burrell Model 35CC Stainless Steel Spray Pasteurizers; 300 and 350 gallon Coil Vats; Type "B," "J," "NH" and "L" Milwaukee Fillers; No. 26 Creamery Package Filler, s.s. bowl; Cherry-Burrell Senior Cabinet Cooler, about 10,000 lbs. capacity; 5 ft., 6 ft. and 10 ft. Tubular Surface Coolers; 12 ft. 4 pipe Internal Tube Direct Expansion Cooler, s.s. tubes; 6,000 lb. C. P. Barrel Heater; 4, 6 and 8 Wide Soaker Type Bottle Washers; Von Gunten Milk Filter, 17x25 inch; 12,000 lb. Peerless Stainless Steel Filter; 1,000 lb. Two Compartment Tinned Copper Weigh Can; 60 to 400 gallon Homogenizers or Viscolizers; 330 and 1,000 gallon Glass Lined Holding Tanks; 7 ft. Copper Vacuum Pan. Write or wire your requirements. Lester Kehoe Machinery Corporation, 1 East 42nd St., New York 17, N. Y. Telephone—MUrray Hill 2-4616. 10-M

FOR SALE—One No. 7 Chester Barrel Heater, 36 nickel silver tubes; 20,000 pound capacity. Hoosier Condensed Milk Co., Bluffton, Ind. 10-M-2

RETIN VATS and TANKS with CROMATIN

1st: BRUSH TIN ON LIKE PAINT

Just mix CROMATIN powder with water and apply with brush, like paint.

2nd: USE BLOW TORCH AND WIPE

CROMATIN makes a smooth level surface fused to metal. Wiping produces lustre.

Guaranteed 5 Years

CROMATIN (Sorensen's RETIN) is a specially prepared tin alloyed with Chromium—is 2 TIMES HARDER than ordinary tin. It can be used on practically any metal surface except aluminum and lead. Flavor of contents in vat or tank positively not affected. The use of CROMATIN often saves costly and time-consuming repairs, and restores to service vats or tanks considered ready to scrap. 1 pt. $12.00—covers app. 200 sq. ft.

Rust-Proof Milk Cans with E-P Buttons

Replate rusty spots in used cans —prevent rust in new cans. No taints or off flavors. 1 button to can. Box 25 buttons $5.50.

THE SORENSEN CO.
4033 23rd Ave., South, Minneapolis 7, Minn.

☐ Send ..... pint cans CROMATIN, @ $12.00 per pint.
☐ Send ..... boxes Sorensen's E-P Buttons, @ $5.50 per box.

NAME OF FIRM.....
Signature .....
(Write address plainly in margin)

☐ Check or M.O. Enclosed.
☐ Send C.O.D.
☐ Bill 2% – 15 days.

AMR 10/44

3 Cherry-Burrell 300-gallon coil vats; 2 C-P 300-gallon coil vats; 1 C-P 200-gallon coil vat; 1 Wright 150-gallon stainless steel pasteurizer; 1 Cherry-Burrell 300-gallon milk vat; 2 Cherry-Burrell 200-gallon spray pasteurizers, with automatic control, stainless steel; 1 Cherry-Burrell cabinet milk cooler; 1 Cherry-Burrell 50-gallon Univat; 1 Cherry-Burrell 50-gallon stainless steel cheese vat; 1 C-P 100-gallon stainless steel cheese vat; 1 Cherry-Burrell 6-wide soaker bottle washer with conveyor; 1 Nuline 7-valve bottle filler, stainless steel; 1 Cherry-Burrell 4-wide soaker bottle washer with conveyor; 1 Cherry-Burrell 700-lb. single roll churn; 1 C-P 1,000-lb. churn; 2 Lathrop-Paulsen Straightaway can washers, 6 cans p.m.; 1 Cherry-Burrell cream fore-warmer; 1 Jurrick 5x5 ammonia compressor; 1 5-ton Climax ammonia compressor; 3 Direct expansion ammonia blowers; 1 Direct expansion Fereon blower; 1 Fereon gas compressor; testers, brine and milk pumps, wash tanks, sanitary fittings, and other miscellaneous dairy equipment. All machinery will have motors attached where needed. Mello-Gold Dairies, Inc., 220 22nd Place, Clinton, Iowa. 10-M